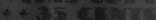
## ACIFIC NIPA APER+ NDUSTRY

1,122

newser that interling to ent of es and mation g proinspect t. He ite are

United 2, were atistics mestic ase of or the uantity papers









This battery of G.E. 500 K.W.H. Steam Turbo-Generators supplies power for the Saginaw-Manistee Lumber Company mill at Williams, Arizona. It also supplies electric power for the town of Williams.

T is therefore important that these generators operate with greatest efficiency and dependability. To insure against lubrication troubles of any kind the engineers of this mill use Union Oils and Greases exclusively.

#### WHY THEY'RE BETTER

Union Lubricants are scientifically refined from selected crudes. They are absolutely pure - free from sulphur, acid, or any harmful sludge or carbonforming elements. Mill engineers all over the Pacific Coast find that Union Lubricants, because of their low cost in relation to their quality, materially reduce lubrication costs per operating bour.

There is a scientifically correct Union Oil or Grease to meet every lubrication problem in the woods or in the mill.

#### **GET THIS VALUABLE FREE SERVICE!**

Whenever lubrication problems arise, call whenever indirection problems arise, call the nearest Union representative or write the Lubricating Oil Department, Union Oil Building, Los Angeles, for the free services of Union's staff of engineers. These experts have often been able to reduce lubrication costs from 10 to 25%-yet gain increased

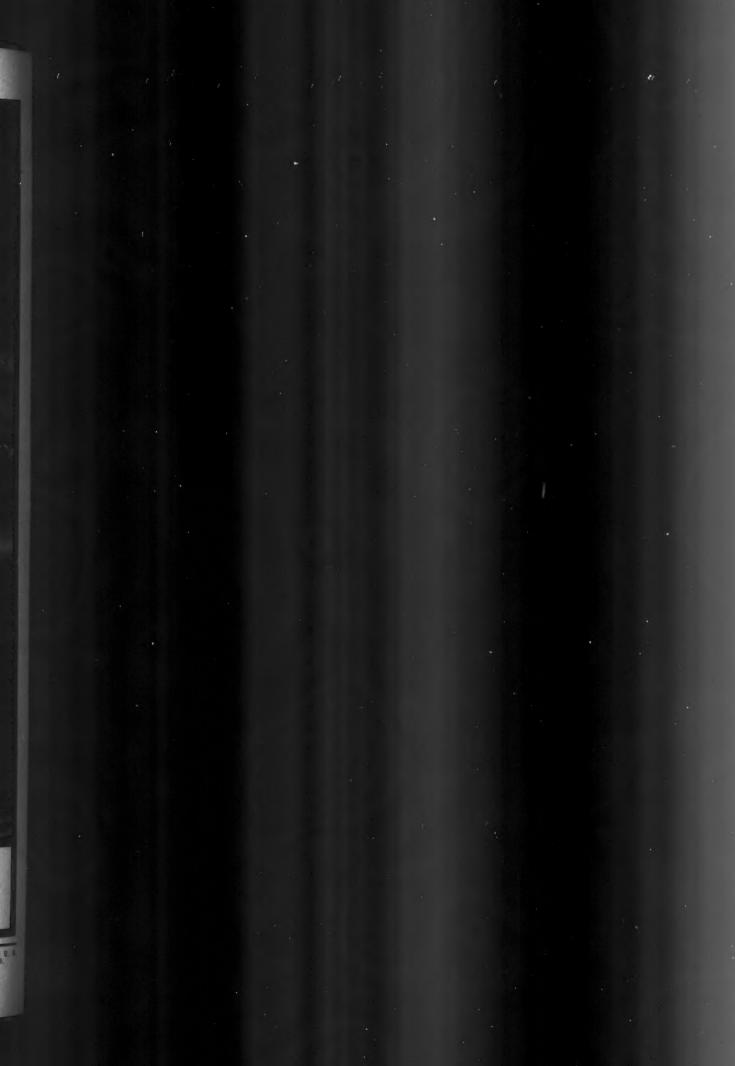
efficiency!
Call or write today. This service is ab-

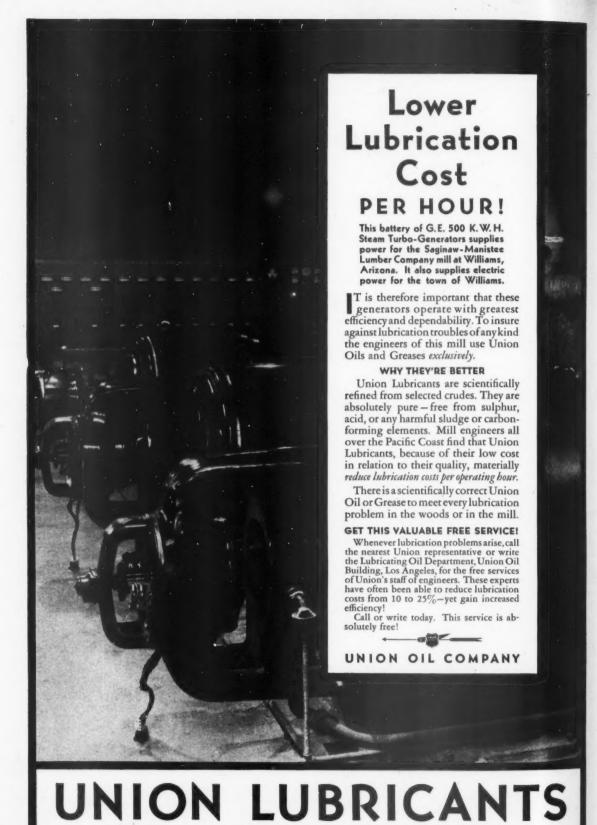
solutely free!

UNION OIL COMPANY

LUBRICANTS

LUBRICATION





run

roll

rem

the

and

per

Fou

mai

and

I

"LOWER LUBRICATION COST PER

# Try this on your old machine

THE new Beloit High-Speed Universal Super-Shake permits the manufacture of high-grade papers at higher speed, with formation equal to the same grade of paper at much reduced speed.

Besides being able to control the intensity and length of stroke of the shake while running, the operator can arrange for a parallel shake or a tapered shake from the breast roll toward the couch roll or in the reverse direction, also the breast roll can be shaken or remain stationary, according to condition.

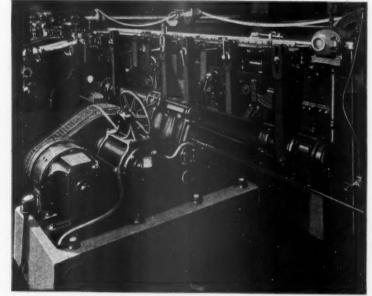
It has been proved that the shake is most effective by being intensified at the point on the wire where the sheet is in process of formation. This point varies with different weights and grades of paper, also different speeds; therefore, this new shake arrangement will

permit the operator to shake the Fourdrinier part in the proper manner for the various grades and speeds of paper to obtain the maximum results.



MOVIE DEM-ONSTRATION See our complete moving picture demonstration showing the operation of the Beloit Super Shake. Wehaveavailable a complete film (standard 16 M.M.) which will be sent to any mill without any obligation.

Write for the details of these new features



Showing the shake mechanism of the improved Beloit Universal High-Speed Super-Shake on a machine making high-grade papers. This shake can be applied to any machine—from news to highest-grade book or bond.

The Beloit Way is the Modern Way

The BELOIT

HIGH-SPEED SHAKE

BELOIT IRON WORKS BELOIT, WIS., U. S. A.

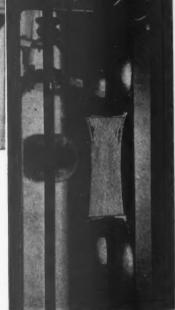




The instrument shown in the photograph is used to measure and record the tensile strength of Kenwood Tanned Felts. This is one of the details of control exercised by Kenwood laboratories to assure the utmost in uniformity to users of Kenwood Tanned Felts.



Guesswork and unsupported claims play no part in Kenwood Tanned Felts. FACTS—known and proved FACTS—guide and control every detail to the end that through Kenwood Tanned Felts, paper manufacturers shall enjoy the advantages of greater strength, increased openness, superior surface and longer felt life.



## KENWOOD tanned FELTS

F. C. HUYCK & SONS
KENWOOD MILLS, ALBANY, N. Y.
KENWOOD MILLS LTD., ARNPRIOR, ONTARIO, CANADA

## If BRIAR€US

## LIVED TO-DAY...

with his hundreds of arms and his fifty heads, what a tender of the older-type paper machine he would be! With a pair of eyes to watch each of fifty operations, with arms stretched from every side to juggle rheostats, to make changes in draw, or to shift belts, he wouldn't even have minded losing a finger or two in lapping pulleys.

But there's no need for Briareus with a General Electric sectional drive. The adjustment of "draw" and "speed" are made from the front of the paper machine. These adjustments are made with hand cranks and hand wheels, providing changes in exceedingly fine steps. There is no uncertainty as to the number of turns to take to obtain draw adjustment, or how far to move the speed-adjusting handwheel to obtain a new paper-machine speed. Each section can be started and stopped or "inched" from the front of the machine. Any number of sections can be started simultaneously—a great convenience if you want to "spot" the wire or "rope" the dryer felts at the same time.

Why demand that your machine tender be a Briareus? With the advanced G-E sectional drive, the same operator can make better paper more cheaply—only one of many facts that work to your profit. Your nearest G-E office will be glad to supply complete information. If more convenient, address General Electric Company, Industrial Department, Schenectady, N. Y

th of This

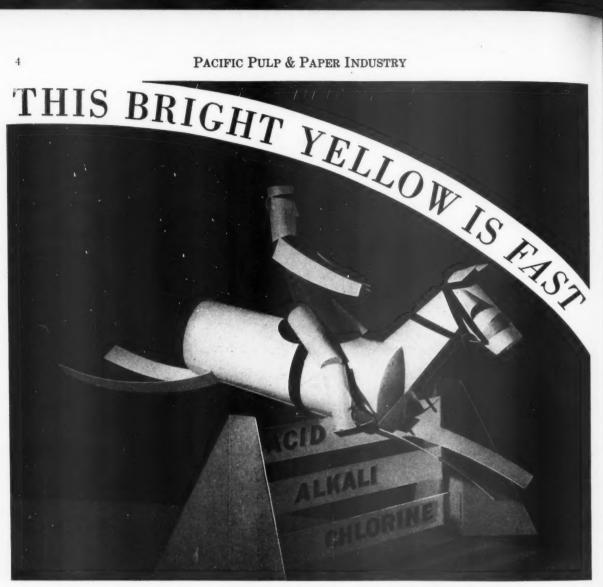




G-E Selsyn draw adjuster and G-E enclosed paper-machine speed-control panel...two important units that help simplify paper-machine operation

237-60

GENERAL & ELECTRIC



Brilliant yellow in shade, Pontamine Yellow SXG possesses good fastness to alkali, acid and chlorine.



THIS du Pont dyestuff gives very little two-sided effect in India tints and buff shades. It is well suited to Buff Ledgers and other papers where fastness to alkali, acid and chlorine is essential. Remember-our Technical Service Department is always at your service to help solve your paper dye problems.

## DYES FOR PAPER

E. I. DU PONT DE NEMOURS & CO., INC. Dyestuffs Division, Wilmington, Delaware

SALES OFFICES: Boston, Mass., Charlotte, N. C., Chicago, Ill., New York, N. Y., Philadelphia, Pa., Providence, R. I., and San Francisco, Calif. Represented in Canada by Canadian Industries, Ltd., Dye-stuffs Division, Canada Cement Building, Montreal, Canada.

Published by the Consolidated Publishing Co., in Seattle, U.S.A., on the 17th of each month-semi-monthly in April.

## **PACIFIC** PULD and PAPER

SUBSCRIPTION RATES

United States and Canada...\$4.00 Other Countries ....\$5.00 Single Copies ....\$35

**VOLUME VI** 

SEPTEMBER, 1932

NUMBER 10

MILLER FREEMAN, President L. K. SMITH, Manager

LLOYD E. THORPE, Editor HARLAN SCOTT, Advertising Manager

WILLIAM FREEMAN, Circulation Manager

#### THE PACIFIC COAST JOURNAL FOR PRODUCERS, CONVERTERS, AND DISTRIBUTORS OF PULP, PAPER, AND BOARD.

SEATTLE 71 Columbia Street

**PORTLAND** 446 Morrison St. SAN FRANCISCO 369 Pine Street

124 West 4th St.

#### INDEX OF ADVERTISERS

| Albany Felt CoOutside Back Co                     | ver |
|---|-----|
| Beloit Iron Works<br>Brubaker Aerial Surveys      | 1   |
| Brubaker Aerial Surveys                           | 37  |
| California Cotton Mills                           | 36  |
| Cameron Machine Co                                | 34  |
| Carthage Machine Co                               | 3.8 |
| Congress Hotel                                    | 29  |
| De Guere, L. A                                    | 40  |
| Inside Back Co                                    | ver |
| Draper Bros. Co.                                  | 32  |
| Draper Bros. Co.<br>DuPont, E. I. DeNemours & Co. | 4   |
| Eastwood Corp.                                    | 34  |
| Eastwood Corp. Edison Storage Battery Co          | 37  |
| Elwell-Parker Electric Co                         | 33  |
| Ferguson & Co., Hardy S                           | 40  |
| Freeport Sulphur Co                               | 33  |
| General Dyestuff Corp.                            | 30  |
| General Electric Co.                              | 3   |
| Gladding McBean Co.                               | 25  |
| Great Western Electro Chemical                    |     |
| Co.<br>Griffith Rubber Mills                      | 6   |
| Grimth Rubber Mills                               | 38  |

| Hardy Geo F   | 40  |
|---|-----|
| Heller & Merz Corn  | 34  |
| Hodges Walter S   | 36  |
| Hardy, Geo. F   | 2   |
| International Wire Works                                  | 3.8 |
| Internationaler Holzmarkt                                 | 39  |
| Kuppler's Sons Co., Chris                                 | 40  |
| Lindsay Wire Weaving Co                                   | 38  |
| Lockport Felt Co  | 31  |
| Merrick Scale Mfg. Co                                     | 35  |
| Mine & Smelter Supply Co                                  | 36  |
| Montieum de la Papeterie Belge                            | 39  |
| Newhall, Charles  | 40  |
| Orr Felt & Blanket Co                                     | 29  |
| Pacific Coast Supply Co                                   | 37  |
| Paper Converting Machine Co.                              | 35  |
| Paper Makers Chemical Co<br>Paper Makers Directory of All |     |
| Nations   |     |
|   |     |

|   | Papier Fabrikant            | 35  |
|---|-----------------------------|-----|
|   | Papier Zeitung              | 39  |
|   | Perkins-Goodwin Co.         | 32  |
| Papier Fabrikant Papier Zeitung Perkins-Goodwin Co. Puget Sound Power & Light Co. Roberts Mfg. Co., F. W.  Schoenwerk, O. C. Selden, Stanley J. Shibley Co., Inc. Shuler & Benninghofen Simons, V. D. S. K. F. Industries, Inc. Stebbins Engineering & Mfg. Co. Svensk Travaru Tidning  Texas Gulf Sulphur Co.  Union Oil Co. Inside Front Co. Union Screen Plate Co.  Waldron Corp., John Waterbury & Sons Co., H. | 38                          |     |
|   | Roberts Mfg. Co., F. W      | 38  |
|   | Schoenwerk O C              | 41  |
|   |                             |     |
|   |                             |     |
|   |                             |     |
|   |                             |     |
|   | S K E Industrias Inc        | 71  |
|   |                             |     |
|   | Co.                         | 3   |
|   | Svensk Travaru Tidning      | 3   |
|   | Texas Gulf Sulphur Co       | 3   |
|   | Union Oil CoInside Front Co | ove |
|   |                             |     |
|   | Waldean Corn John           | 2   |
|   | Waterbury & Sone Co H       | 2   |
|   | waterbary & John Co., It.   | ,   |
|   | Zellstoff & Papier          | 3   |

### Complete Your Picture

What do you know about the vast Western industries which manufacture products, other than pulp and paper, from our forest raw materials?

forest raw materials? Complete your picture now. Tear out this advertisement and mail it to us with your name and address. You will receive a sample copy of the only Western woodworking journal, together with a subscription offer.

Western Wood Worker & Furniture Factory

71 Columbia St., Seattle, Wash.

#### THE BACKGROUND OF PULP AND PAPER

Every pulp and paper mill man who looks beyond the chipper and pulpwood pile, finds a most important field of vision. Forests, lumber, these form the background of pulp and paper.

Keeping apace of developments in the lumbering field, as directly affecting your business, is well worth while. This can best be done by reading the leading lumber journal, West Coast Lumberman, each month. Subscription, \$3.50 per year, including the Annual Review. Foreign, \$4.00.

#### WEST COAST LUMBERMAN

71 Columbia St.

Seattle, Wash.



А

Seven-League Stride to brighten groundwood paper stock has been made by perfection of the

#### HYDROSULPHITE PROCESS

of bleaching developed and recently patented by the Great Western Electro-Chemical Company.

A year's experimentation in actual mill operation has conclusively demonstrated the revolutionary effectiveness of the new process. From the darker hemlock of the Pacific Northwest, and even from discolored woods, zinc hydrosulphite has produced a brighter sheet of groundwood than has ever been thought of with the older forms of treatment such as sodium bisulphite or sulphite cooking liquors, and the treatment has consistently been completed in a few minutes, eliminating the costly 18- to 20-hour retention period previously necessary. Zinc hydrosulphite is already standard practice in several Pacific Coast mills.

No special equipment is required for the application of the new process. The hydrosulphite may be introduced easily through your present equipment, either close to the paper machine, in the beaters or mixers, or into the conveying pipes of a continuous system. The quantity necessary is never more than  $1\frac{1}{2}$ % of the weight of the stock, and in some cases runs as low as one-tenth of 1%. Since hydrosulphite has only a slight effect on the pH value of the pulp all corrosion is avoided.

For the cheaper grades of book and magazine papers, newsprint, and fruit wrap, the hydrosulphite process makes tremendous savings and produces a better sheet than is possible with any other bleaching reagent. You eliminate heating costs, because the new treatment works at ordinary temperatures. You save valuable time by reducing hours for treatment to minutes. You provide a better product, at a price, to meet the increasingly exacting demands of present-day publishing, advertising, and package display.

Experimental quantities of zinc hydrosulphite can be supplied in drums of 50, 100 and 200 pounds. We shall be glad to answer inquiries with detailed information on the new treatment.



U. S. Patent No. 1,873,924 Canadian Patent No. 307,440

#### GREAT WESTERN ELECTRO-CHEMICAL CO.

9 MAIN STREET, SAN FRANCISCO

SEATTLE

PLANT: PITTSBURG, CALIFORNIA

LOS ANGELES

LIQUID CHLORINE

BLEACI

**AMMONIA** 

ZINC HYDROSULPHITE

## DEPRECIATED EXCHANGE

RENEWED and more exhaustive inquiry into the effect of depreciated foreign currencies upon the industrial structure of the United States looms as one outcome of the recent conference of industrialists held in Washington at the invitation of President Hoover.

In response to requests from the White House, representatives from the twelve Federal Reserve Districts met in a National Business and Industrial Conference with the President on August 25th and 26th. The dominating thought behind the conference was to inquire into the fundamentals underlying the nation-wide unemployment and to discover by what aggressive means remedies could be applied.

Miller Freeman, Seattle, publisher of PA-CIFIC PULP AND PAPER INDUSTRY, attended the conference as a representative from the Twelfth Federal Reserve District. Armed with information gathered on a country-wide basis from the pulp and paper industry—which industry has been particularly disturbed—and information on other industries, Mr. Freeman presented at the conference the subject of debased foreign currencies and their effect upon the industrial interests of the country. Particular stress was put on the point that disruption of our industrial structure has been an important contributing factor aggravating the unemployment problem.

The general conference program was scheduled in advance on a few broad lines and discussion was limited to these guideposts. However, at a meeting of the delegates from the Twelfth Federal Reserve District a resolution was passed urging that the problem of de-

HITE

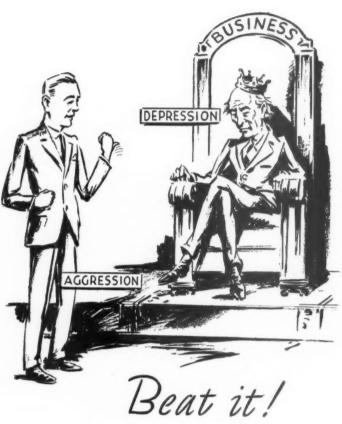
preciated foreign currency competition be given consideration.

The President's Business and Industrial Conference was steered by a Central Committee headed by Henry M. Robinson, Los Angeles, as chairman. As a result of the expression of opinion and the resolution drawn by the Twelfth Federal Reserve District delegates, Chairman Robinson appointed a Committee on Foreign Exchange with the following personnel: Miller Freeman, Seattle, chairman; Charles E. Dant, Portland, and A. Schleischer, Los Angeles.

The Committee on Foreign Exchange will execute a three-fold function: to investigate the effect of depreciated foreign currencies on American industries, standard of living, and employment; to use governmental agencies and other sources available in examining the problem; and to report its findings and recommendations at the earliest possible date to the Central Committee.

The Business and Industrial Conference adjourned following the two-day meeting, but it left as tangible results a definite plan of action and the skeleton machinery for getting that action. The Central Committee has been carried over as a continuing body that will function for the duration of the national emergency. It will maintain close contact with the administration.

The net results, with particular reference to the pressing problem of depreciated foreign exchange, is that a definite agency is set up to correlate all facts on the evils of this new form of inequitable competition and that in arriving at these facts this agency will have the cooperation of all contingent government agencies.



## AGGRESSION-

#### That's the new word for it

A GGRESSION is succeeding to the throne of depression. This is not meant to say that happy days are here again in the sense that we knew them prior to three years ago. But, witness the events of recent weeks: the stock market with new life; cotton prices up a bit; farm products showing the first bit of stiffening; slight, but basic, improvements in staple commodities; more optimism; more backbone.

Lots of adjustment still to be made. And being made. But a comfortable feeling that three years of adjustment have not been in vain, that the past is behind, that we are set up for different music and that it is better to learn the new tunes than to insist futilely on dancing the old steps.

How is the industry adjusting itself. From one engineer of long experience we learn that:

"They have quit talking of their woes and seem to have settled down to the conclusion it does no good anyway. Some of them are taking advantage of slack market to discover new or better products, and I think we will find the depression has been the direct cause of bringing into existence new products and better ways of making the old ones.

"Most of the mills have cut their costs about as far as they can go without closing up entirely. I think the general feeling is that things are about as bad as they can get and from now on any change will be for the better, and with that conviction there is a slightly more hopeful spirit.

"The mills in general have done little buying for replacements and are running on the ragged edge in this respect. The chief engineer of one of the large concerns in this district a short time ago apologied for the statement that for the first time in their history they were giving consideration to second-hand or used machinery where formerly they would not have considered anything but the best and newest on the market.

"When business comes back, there is going to be a lot of buying by the paper and pulp mills of the country because they won't be able to turn out the capacity nor the quality of product the market will require, since in many cases they have allowed their equipment

to get run down, and they have also operated on a curtailed production basis so long that they will have to learn the business all over again. There are some who are alert enough to keep on their toes even in these times, and they are the ones who will reap the real benefits when the tide turns.

"The greatest hindrance to rehabilitation of present plants is, as I see it, the fact that the manufacturer cannot make up his mind as to what the future has in store for him, because his hopes fostered by the boom before 1930 are so completely shattered that he hasn't any measuring stick left by which he is capable of gaging the future, with the result that he just sits back expecting the worst but hoping that some miracle will happen to prevent it."

"Here is another phase of this subject which also lends gloom to the outlook of the paper mill executives; viz., this mill man is not only interested in the enterprise over which he presides as the guiding factor, but he has also invested in numerous other enterprises in the way of stocks, bonds, and debentures and every one of these is either flat or so near to it that a sheet of paper would be hilly by comparison. If only their own business was in a bad way, they would not feel so discouraged, but under the circumstances all the fight has been taken out of them and they are inclined to let their business ride without proper consideration for its future. This should not be the case and those who are not looking forward will discover later they are left behind in the race."

One paper merchandiser in the Western states tells how his organization has thrown the past to the winds. It

> These are the days in which we must live. Not yesterday, nor tomorrow, but today. The dance of life goes on, but the tunes and the steps have changed.

has recognized that conditions have radically changed and with readjustments has shown profit to be possible. This man writes:

"Some four months ago we began revamping our own organization, our viewpoints, our methods and operations to provide more concentrated, determined and enthusiastic solicitation of business.

"At that time after we had come through a year of attempt at reduction of selling expense by the usual methods of enlarged territories for salesmen, etc., we were convinced that efficient man power had been reduced in cost proportionately to other commodities. We, therefore, sought and found the required selling ability and began a campaign of intensive effort for new business.

"We are glad to say that our venture has been successful, and we feel that our organization from a standpoint of efficiency, enthusiasm and future possibilities, is in a better position than any time during the past three years. One thing has been proved definitely. There is no substitute for a good salesman, and there are many such who are desperately eager to prove their worth. Reports coming to us indicate a very definite change in the minds of our buyers and we certainly are firm in our belief that the trend of buying, retail and wholesale, will definitely continue on an upward trend.

One mill man, while feeling strongly that prices are at the bottom, is slightly pessimistic with respect to the human element. He remarks that "It certainly looks as if we ought to be at the low ebb at the present time." And then goes on to say:

"Based on cost of production and other manufacturing items, commodity prices are as low as they should be. But you never can tell what will happen with the human element which is determining the prices to be made on manufactured goods, and sometimes they are made irrespective of costs. This is not a healthy condition and is one reason we are in the present unsettled state of affairs. It will no doubt improve just as soon as there is a little more business, but when there is not enough business to go around, competition is keen and efforts are made to get what business is available irrespective of what price they have to make, and whether it is a satisfactory one or not."

Another manufacturer with a name well known in the industry sees little use in harping upon the past, or in speculating on the future. The problem is today. He despairs a little at the element of greed which brings on difficulties, but offers a corrective suggestion, with the reservation, however, that adjustment of supply to demand may not be possible on any voluntary basis. He writes:

"We are all more or less prone to give too much consideration to the past, which we cannot correct, and to the future, which we cannot foretell.

"We can only control our present actions and only by adjusting them properly to present conditions will the future take care of itself.

"We know the present consumption of paper and what relation it bears to production. We also know what it costs to make paper under 50% operation, consequently, we cannot operate profitably until our selling prices are higher than our present costs.

"The principle of lowering prices to secure a more than normal percentage of the business available is the most destructive element in the present situation.

"If the laws of our land are revised to permit the adjustment of production to consumption and manufacturers become wise enough to apply such changed laws to their benefit by selling only at a profit, the problem will be solved.

"Very few will disagree with the solution, but how many will accept it?

"It seems almost as though there will have to be a mandatory control."

And then to draw from another, one of the best known of the paper distributors in the West, we find recognition of changed conditions, and of a returning confidence. Construction is gradually taking the

place of destruction. Aggression is pushing aside depression. To quote this man more fully:

"If the present confidence that seems to be gaining momentum throughout the country is an indication that we are about to turn, or have turned, that mysterious corner and that business is on the ascension, then it is time business institutions throughout this country clear their decks and put themselves upon the offensive, and this can be done only under strong leadership.

"It would seem to the writer that what we have lacked to a very large extent, in the last two or three years is that character of leadership that is based upon courage, faith and confidence with a firm determination to fight it out along good sound business principles and ethics. Instead, we have lost our fighting heart, have drifted with the tide, have taken the course of least resistance—thus contributing, to some degree, to the so-called business depression. In our wild scramble for our share of business, we have met unfair competition with the same disastrous methods, thus breaking down the whole morale of business.

"Probably one of our greatest difficulties in the past year or two has been due to unethical and destructive competition, which, in a large measure, is a direct result of lack of strong leadership. A manufacturer or a merchant will name a price or adopt a policy, in order to get business, regardless of the possible demoralizing effects. Others meet the price or condition, thus adding to the demoralization, overlooking the fact that two wrongs do not make a right.

"There is increasing evidence that the merchants throughout the country are taking heart and that, at last, constructive influences are getting the upper hand. Selfishness, greed, fear, lack of principle and good business ethics, failure to understand and appreciate what constitutes good merchandising, have been some of the underlying causes that have contributed to the present uncertain, unsettled and unsatisfactory business conditions. With these removed and with faith and optimism, and under strong, progressive business leadership, we shall emerge from this depression sooner, perhaps, than we expect and regain our old dominant successful position in the business world."

And here finally is a forceful statement from a man of many year's experience in the industry and who, by reason of his present position has close contact with the pulse of business both in the paper industry specifically and business as a whole generally. There is a reasoning and practical determinism in this statement that prompts quoting in full:

in W son him

lu

ye lu fic sh pr w by

of in h

"It is well to project not only the thought but the actual belief that we have arrived at a time in this depression when it is necessary to face about and take a new inventory of the nation's affairs.

"If all business men will do this calmly, deliberately and without prejudice because of the effect of the past three years, but merely consider that it has taken all of this time to readjust our economic affairs, which had become so tremendously out of balance and untenable, they will recognize that we actually are nearing the bottom of this great business cauldron, which for a period of ten years has been boiling over without restraint. They will undoubtedly come to the realization that it is time to concede that conditions are fast becoming normal and what we now require is faith and hope, with a little charity thrown in to tide those over who have been especially unfortunate.

"Personally I feel we have reached the turning point. In fact, there are several assuring signs pointing that way now and, while the recovery will undoubtedly be slow, with the necessary faith and willingness to do our part, and the effort now being put forth by our federal government in trying to improve our credit control, together with some advice and help to better control our destructive competition, we should be a long way toward an improvement by January 1, 1933."

## LUBRICATION-

intelligently done offers economies



le de.

g mowe are ad that tutions

nselves strong ed to a aracter fidence sound fight-

arse of the so-

strong rice or

dition,

ct that

rough-

ructive l, fear, under-

ited to

shall

expect usiness

man

10, by

with

pecifi-

a rea-

t that

it the

this

take

rately

past

en all

h had

nable,

g the

for a

it re-

ation

st be-

and

over

point.

that

ly be

o our

deral ntrol,

ntrol

way

TRESS of competition in the present strenuous days has sharpened the eyes of mill management to manufacturing economies that went unheeded when money flowed more freely. The attention has been focused upon lubrication, as well as upon other factors in the whole process of manufacturing. Such attention does not, however, confine itself to rebuking the

oiler for trailing a few drops off the oil can spout, but searches into the larger benefits that are to be found in intelligent study of the mill lubrication problem. We have progressed from the day when we handed some young fellow a can with a long spout, showed him where the oil barrel was, and told him "to keep things greased."

Take, for instance, the specific problem of efficient lubrication of paper mill beaters. In the past few years much attention has been directed toward the best lubrication of beater bearings. Here were several difficulties to contend with,—heavy parts subject to severe shocks, heavy power load, water, dirt, the necessity of preventing contamination of the pulp stock. Here were definite opportunities to reduce operating costs, by reducing the cost of lubricants used, by insuring smooth and continuous operation.

The extreme problems of high temperature, pressure, contamination in the bearings by foreign matter, carbon formation, and other factors have been responsible for improvements in beater lubrication. The cost of power has been only a small item when compared with the greater potential economies that could be effected by eliminating losses involved in production stoppage for an hour or so a day.

Beating is a general term for mechanical treatment given to paper making materials suspended in water to mix them and to prepare them for forming on a paper machine a sheet of paper of the desired characteristics. The beater is essentially the first step in paper stock preparation for it is at the beater that materials which are to impart the final qualities to the paper—color, opacity, sizing, etc.—are added to the fibrous pulps.

By J. E. LACKNER Lubrication Engineer The Texas Company

Beater bearing lubrication has for a long time continued in the realm of stone age methods. The problem was recognized as fraught with many difficulties, and the result was that nothing much was done about it. The crudest of methods continued to be accepted practice, largely because nobody took the time and the trouble to figure out just what was happening in those overworked bearings. It was just a case of "give it plenty of grease" and get along the best you can.

The older methods which are now fading into discard employed wick feeding, felt pads, block grease or wool yarn grease. These have given 'way to collar oilers, antifriction bearings, and the installation of suitable guards to prevent contaminating materials from entering the bearing and possibly washing out the lubricant.

One of the predetermining factors in beater lubrication is the weight of the beater roll. The ponderous character of the machinery naturally develops severe pressure on the bearing surfaces. The nature of the work imposed upon the beater roll subjects the bearings to severe and frequent shocks. The alternate lifting and dropping of the journal has resulted, in the older type bearings, in permitting the "stuff" to enter the bearing and work all sorts of injury. However, this fault has been largely overcome in the more recent bearing designs as engineering attention has been focused upon ways and means of absorbing the shock.

Up until within very recent years the industry has used a plain bearing with water jacket for beater service. That usage prevailed for about thirty years, being preceded by plain bearings without the water jacket feature. Except for the water jacket principle there has been no material change in beater bearings for many decades.

In lubricating the old style bearings the operators used either grease or oil. Grease was usually applied in brick form, or in some cases a medium grease was mixed with wool yarn, or a regular wool yarn grease

would be purchased. Where oil was used the wick feed,

felt pad, or sight feed cups were applied.

There was little protection against outside dirt contamination in the old style bearings. In most cases no protecting cap was used. In a few cases a primitive sort of protecting cap was provided and on occasion this cap would take the form of an oil reservoir for wick feed or sight feed cups. Almost invariably no oil grooves were provided in the bearing and this deficiency further retarded the possibilities of proper lubrication. The babbitt was simply beveled off at a height even with the center of the shaft. Many of the older style beater bearings are still to be found in present day use, but they are for the main in the older mills.

The more recent designs in babbitted beater bearings are of the collar oiling type. Only the lower half of the bearing is babbitted. The upper half serves mainly as a protecting cover and to carry the oil distributing means. In operation oil is carried up by the collar, stripped off by the wiper resting on the top of the collar, which device serves to spread the oil both ways toward the ends of the bearing to flow from there

down upon the bearing surfaces.

#### Later Types

In these later type bearings the babbitt is beveled off at the top of the lower half so as to permit the oil to enter between the bearing surfaces. Oil grooves are cut from this channel around the bearing according to the direction of rotation of the shaft. With this arrangement oil is fed into a longitudinal groove which is beveled off to give a sharp wedge-shaped film of oil.

In this way the oil is delivered at the place just ahead of the point of maximum pressure. The arrangement embodies the principles of wedge film lubrication. The necessity of water jacketing is eliminated in this type of bearing. The exposed end of the bearing is enclosed and oil grooves are provided at each end to prevent oil working along the shaft and out of the bearing. The possibilities of this type of bearing being contaminated with water, pulp, or dirt are eliminated.

Anti-friction bearings have come into great general use in all industry in recent years and the principle has in fairly recent times been applied to the difficult beater position with success. These bearings have all the advantages of the collar type bearing and in addition

offer reduced power consumption.

#### **Economies Possible**

With respect to mill lubrication problems in general it should be stressed that here is a fertile field for effecting mill economies. Approached simply from the stand-point of reducing the budget by cutting down on the total volume of oil used, or by price-hunting for lower cost grades, the potential economies will be disappointing, inasmuch as the cost of lubricants in the pulp-paper mill is a relatively unimportant item of expense when compared with other purchases. The greater savings are to be found in the proper selection and application of lubricants to the end that continuous performance will be positively assured. Even the most expensive lubricant will be cheap when stacked up against the cost of shut down.

Oil is no longer just oil. The oil companies found that out long ago, for by bitter experience they have had to find out what is THE most satisfactory lubricant under under every conceivable type of service. Having had to serve all industries they have found that to render satisfactory service they must specialize on problems of lubrication and know exactly under what conditions a lubricant is to be used. Bigger and faster machines have served to complicate the problem. Many

pulp and paper mills today have turned over the entire plant lubrication problems to the responsibility of one This man may not necessarily carry an oil can. but it is his duty and responsibility to have the right oil in the right place. And the practice has proved to be worth while.

of Me

Swe

WO

the

cut

rat

un

co

me ce;

Swof

of co

#### **CARLOADINGS**

of paper and pulp in the Pacific Northwest show no immediate improvement for the last quarter of the year in the report of C. B. Richards, traffic manager of Haw. ley Pulp & Paper Company, as chairman of the paper, paper products and pulp committee of the Pacific Northwest Advisory Board, meeting September 9 at Spokane, Washington. In fact, Mr. Richards estimates a decrease of 14.7% as compared with the actual carloadings of the last three months of 1931.

However, this decrease is not all due to a decline in Some of it can be accounted for by the railroads losing business to truck and water lines.

"The condition of the Northwest pulp and paper industry," says Mr. Richards, "has shown very little, if any, improvement during the quarter just passed and the reports received from the district chairmen for this quarter do not indicate any immediate improvement. In fact the returns from the district chairmen reflect a decrease of 14.7% in the car requirements for the fourth quarter of 1932 as compared with the same

period of 1931.

"The decrease in estimated carloadings is due to several causes. Economic conditions have limited the purchase of paper and paper articles to immediate requirements, thus eliminating the additional cost of warehousing, etc. Truck and water service is, also, affecting the rail movement in local territory. The truck, especially with its frequency of service, together with pickup and delivery under very low rates has proven the rail lines' keenest competition. The rail lines are, however, through reduced rates and minimum weights, trying to recover some of the tonnage which has been lost to the

"It is interesting to note that some of the Northwest mills are preparing to market new specialties in addition to their principal products, and we believe that this can be taken as an indication of an upward trend in the

paper industry.
"Some mills in this vicinity are still operating on a shortened schedule, but it is interesting to learn that others, which have been idle for quite some time, are preparing to resume operations.

Following is a statement of actual and prospective loadings for the fourth quarter of 1931 and 1932:

|          | Actual<br>Loadings<br>1931 | Prospective<br>Loadings<br>1932 |
|----------|----------------------------|---------------------------------|
| October  | 520                        | 443                             |
| November | 438                        | 374                             |
| December | 409                        | 349                             |
|          | 1367                       | 1166                            |

#### EARL VAN POOL

-San Francisco, well known Pacific Coast manager of The Brown Company, pulp and paper manufacturers of New England, was married July 8 to Miss Josephine Miller of Portland, Ore. Mr. and Mrs. Van Pool spent their honeymoon at Lake Tahoe and other points in the High Sierras and are now residing at 1980 Washington St., San Francisco. Mr. Van Pool has been ten years with the Brown firm.

#### THE SWEDISH PULP MILL STRIKE

—which started last Spring and affected about 15,000 workers, was settled on August 8th, through acceptance of the new wage proposal made by the Government Mediation Commission. Work was resumed in the Swedish wood pulp mills as soon as possible, according to a report to the Commerce Department from Trade Commissioner Basil D. Dahl, Stockholm.

A general wage reduction of 7 per cent both in piecework rates and hourly rates was included in the new contract. Some of the minor changes made are in favor of the employers. It was feared that the strike at one time

would lead to serious events.

one

t oil

o be

v no

year law-

iper.

cific

9 at

car-

ie in

aper

ittle,

and

this nent.

ect a

ame

sev-

puruire-

the

ially

ines'

ever,

g to

the

west

can

on a

that

are

ctive

igs

r of

irers

hine

pent

the

gton

ears

Initial efforts at mediation were unsuccessful and on February 18, the employers put into effect a 6% wage cut in hourly wages and 12% per cent in piece work rates. Workers immediately called for strike in eight of the largest mills producing pulp for export. After unsuccessful governmental mediation, the strike was extended to take in all those mills producing for export.

Each of the previous proposals made by the mediating commission which were rejected by the workers, was more favorable to the latter than the proposal just accepted. The new wage agreement expires December 31,

1932, it was stated.

It is estimated that the stoppage of production in Sweden through the labor disputes took 700,000 tons of chemical pulp off the world market. Sweden is the premier exporter of chemical wood fibre. Total production of chemical pulp in Sweden in 1931 amounted to 1,727,000 metric tons—slightly less than the preceding two years — of which 1,332,000 tons went into the export market. The loss is not likely to be made up by increased production.

Opinion varies with regard to the effect of resumed operations in Sweden. More pulp will, of course, become available, but prices are already so distressed and consumption at such a low ebb that forecasting is difficult. There has, however, been some slight softening of prices recently. Prime bleached sulphite is now quoted at \$40 per ton and up, whereas the half prime is listed at \$37 and better. Unbleached strong pulp is selling down to \$28, while kraft pulp continues at \$30

and under.

The significant phase of the Swedish strike "settlement" is that the mill operators are evidently not satisfied with the scaling down of wages thus far effected and are determine to press down this element of cost still further. The agreement reached in August provides for a reopening of the wage question on November 1, for a new and lower wage scale to become effective January 1, 1933. More labor trouble and potential production loss is on the horizon.

IF OREGON IS TO PROGRESS AND PROSPER ITS INDUSTRIES MUST PROGRESS AND PROSPER. THIS IS TRUE IN NORMAL TIMES AND IT IS DOUBLY TRUE IN TIMES OF DEPRESSION SUCH AS WE ARE NOW EXPERIENCING. ALTHO THE PRODUCTS OF OUR INDUSTRIES HAVE BEEN SUCCESSFUL IN ENTERING DISTANT MARKETS THEY HAVE NOT RECEIVED WITHIN THE BORDERS OF OUR OWN STATE THE PATRONAGE OF WHICH THEY ARE DESERVING. IT IS FUNDAMENTAL THAT THEY MUST ENJOY TO THE FULLEST EXTENT THE PATRONAGE AND SUPPORT OF THE PEOPLE OF THE STATE. THIS WILL GO FAR TOWARD ACCOMPLISHING A REAL AND PERMANENT SOLUTION OF THE UNEMPLOYMENT PROBLEM WITH WHICH IT IS NOW CONFRONTED.

Extract from a recent speech on home products by Governor Julius L. Meier of Oregon.

(A question propounded to sundry Pacific Coast Scripps-Canfield newspapers in their own well-known literary style)

Gentlemen of the Press:

We feel sure that you will not mind answering a simple question, put to you as patriotic American citizens, because it is a question that involves patriotism—and whose love of America is greater or better known than your own? For you shout it from your front pages night after night. Indeed, on your own testimony, there can hardly be any others so patriotic as yourselves.

Beside your bold patriotism the red bravery of Patrick Henry pales to pink — the true blue patriotism of George Washington fades from indigo to baby blue — the staunch white flame of Nathan Hale's loyalty snuffs out to a greyish ash. You, gentlemen your own words oft repeated for it!—are patriotism personified.

Patriots, we salute you and put one pertinent question to you.

Why, when you brought in a shipment of newsprint from a foreign mill 13,000 weary, watery miles away in July, 1932, did you have orders issued all along the line for not one word to be breathed about it. Why were instructions issued that no word must be given out about the movement of the foreign flag motorship "Elg" as she scurried down the Atlantic, through the Panama Canal and up the Pacific to Los Angeles, to Portland, to Puget Sound? Why were dire threats made of loss of jobs, loss of patronage to agents, to dock operators, to one and all under your patriotic thumbs, if any information was given out about the millions of pounds of newsprint consigned to your patriotic presses in principal marts of business on the Pacific Coast?

Why do you bold and powerful patriots fear to blazon forth in front page banner these words— "This Newspaper Printed on Dumped Foreign Stock!" Why do you hesitate to tell all and sundry that you have pinched a few pennies off your budget by buying foreign newsprint?

Surely, such bold heirs of the fourth estate would not hesitate to speak the truth at any cost. Certainly, that hollow-cheeked wife of yon disconsolate, idle papermaker would readily understand if you explained to her that there can be no sentiment in business. How could she be so heartless as to put her starving, fevered child ahead of your so-important, so-patriotic interests.

Certainly, no subscribers could be so thoughtless as to cancel because you choose to save a few dollars by buying your newsprint where it is cheapest. Things have come to a pretty pass if you must be dictated to! Where you buy your paper is your business, and if they are so un-American as to ruin an honest American's business out of sickly sentiment, who'll wave the flag in your place when you are gone?

Of course, no self-respecting advertiser would think of cancelling a contract with so astute a newspaper.

They care not if decent readers have lost all respect for your words. How their messages get to the public matters not at all—just so they get there. And perhaps by buying foreign paper, and maybe—if exchange rates keep dropping—buying foreign ink, and perhaps importing foreign labor, you can get along without subscribers altogether and toss your eaglescreaming sheet on every doorstep.

Gentlemen of the press that daily bleeds and dies for America while we await your answer we will ask the band to play—

"Oh say, can you see-"



## OFFICERS Pacific Section — TAPPI

CHAIRMAN — Ralph Hansen, Weyerhaeuser Timber Company, Longview. VICE - CHAIRMAN — Harry Andrews, Powell River Co. Ltd., Powell River. VICE - CHAIRMAN — Longe P. V.

VICE - CHAIRMAN — James P. V. Fagan, Puget Sound Pulp & Timber Co., Everett.

VICE-CHAIRMAN—Ray Schadt, Hawley Pulp & Paper Co., Oregon City.

SECRETARY - TREASURER — E. G.
Drew, J. O. Ross Engineering Corp.,
414 Lewis Building, Portland.

SEATTLE will be host for the pulp and paper makers of the Pacific Coast when the Pacific Section of TAPPI holds its 1932 Fall meeting. It will again be a two-day session. The dates have been sent tentatively for Friday and Saturday, October 21 and 22, but are subject to slight change dependent upon the itinerary of one or two headliners the Section hopes to place on the program.

The Portland meeting held last May was highly successful in point of attendance, work accomplished, general arrangements, and balance of educational and entertainment features. It will be the aim of those in charge of the Fall program to pattern the Seattle meeting along similar lines, but to embody in the Fall plans the well known slogan of "bigger and better."

the well known slogan of "bigger and better."
Ralph Hansen, Section Chairman, has been developing a discussion program designed to be of broad appeal and pertinent to the problems of the day on the Pacific Coast. He promises plenty of exercise for the brain, but with improvements in the process of educational absorption to make the work easier.

It is hoped to have present Westbrook Steele, executive secretary of the Institute of Paper Chemistry, to expound on the character of that fast-developing institution and to explain how the work being carried on there has particular application to problems of Pacific Coast mills.

The program will not adhere solely to the deeply technical problems, but will embrace also subjects of economic nature which are today just as pressing as anything to be found in the chemists' test tube. The final arrangements will probably devote Friday morning to registration and technical papers, Friday afternoon to golf and other entertainment, Saturday to technical papers, with a business session toward the close on Saturday afternoon.

There are a number of important pieces of business to be taken up. As is the custom with the Pacific Section, officers will be elected for the ensuing year.

There will be an important message to the Section from the National Association. The national body held its Fall meeting at Holyoke, Mass., on September 13-16, and the Coast was represented there to present certain problems peculiar to the Pacific Section and to ask for consideration.

It isn't going to be all work. Seattle can usually guarantee good golf weather in late October. The ancient and honorable game will again hold forth, with handsome prizes again in evidence for those with all degrees of skill. There will be one or more industrial visits. There will be lunches with the lighter vein of life predominant. There will be evening repasts.

The ladies are especially invited. At Portland there was a very creditable turnout of the fair sex, and the Seattle meeting will be designed to draw an even larger attendance.

Chairman Hansen wishes it to be known that while the meeting is officially sponsored by Pacific Coast members of the Technical Association of the Pulp and Paper Industry, any and all who have an active interest in the industry are invited to attend and participate in the discussions and social activities. The meetings of the Pacific Section are becoming more and more an open forum for discussion of the problems of the Pacific Coast mills, and frequently the question box spontaneous floor discussions bring out a wealth of interesting data in addition to the formal papers.

Put the dates down now, and watch for further announcement in more detail from the Chairman..

#### BEN LARRABEE

—superintendent of the Pulp Division, Weyerhaeuser Timber Company, and Pacific Coast representative on the National Committee of TAPPI, attended the Fall meeting of the national organization at Holyoke, Miss. While in the East he participated in the deliberations of the association's executive committee, carrying to it an expression of the particular needs of the Pacific Section.

Mr. Larrabee, before leaving, voiced the sentiment that the Pacific Coast members, due to their remote geographical location and the distinct nature of their problems, had need of special consideration in order that the Pacific Section may function with most effectiveness.

"The national meetings do not get farther West than Wisconsin," said Mr. Larrabee, "and it is almost out of the question, due to the time and expense involved, for the Pacific oCast members to attend. The circumstances impose some practical problems which, must be satisfactorily solved if the Western members are to get proper benefit. These problems I propose to discuss at the national meeting."

#### TO THE MEN OF THE INDUSTRY

To get the most out of these meetings we must have attendance and the active, cooperative interest of the membership. When we have the latter, we automatically get the former. There are many excellent ideas lying dormant in the minds of the men who make the wheels go in the Coast mills. Dormant ideas have no value. Let this be an urgent and open invitation to the men of the industry to bring those ideas out into the sunshine, to communicate with your Chairman at once, that we may all benefit by a bigger and better Fall meeting.

Cordially yours,

RALPH E. HANSEN, Chairman, Pacific Section, TAPPI

#### TAPPI WILL MEET AT HOLYOKE

—on September 13, 14, 15 and 16 for the annual Fall session of the national body. A splendid practical program on wood pulp specifications and classification has been arranged.

That's a good subject. An attendance "feeler" asks these pertinent questions. Would it not be of great help to you to know how to specify the kind of pulp you would require for a bond paper so that you would not buy a pulp better suited for a book or papeterie? Would not the classification of pulps, based on a use factor, mean more than simply buying a good bleached sulphite at a price?

The Institute of Paper Chemistry will give its completed report on the comparison of the stability and permanency of cotton and wood cellulose.

## WOOD PULP-

one of the world's staples

" . . . the way out is through trade cooperation and controlled production . . . "

IN 1877 the progress of the American paper industry had been so great that serious concern was expressed on the part of the industry, and an association was formed for the purpose of "keeping up prices, mutual protection and the presumed benefit of all manufacturers and dealers."

hile oast and crest e in s of

Paponnter-

user on Fall Miss.

ions

nent note their

ef-

than

it of

, for

nces

atis-

get

cuss

Fall pro-

has

asks

reat

pulp

ould

rie?

hed

and .

Thus we are reminded in our own strenuous times of "too much capacity and too few sales" that the industry has had its problems before, problems very similar to those of today. The preceding paragraph is culled from a comprehensive and interesting survey of wood pulp as one of the world's staples prepared by Thorsten Lundgren, managing director of the Swedish Cellulose Association and the Swedish Wood Pulp Association. The survey appeared in the July 1932 issue of the "Index" published by the "Svenska Handelsbanken", Stockholm.

Following opening paragraphs which are chiefly useful in acquainting the layman with the nature of wood pulp and the several manufacturing processes involved, Mr. Lundgren presents an array of world statistics covering production, consumption, imports and exports of pulp and paper for the leading nations of the world. The data in some cases goes back for twenty years to show trends. He brings in relief the startling growth of the world's paper industry in the following statement:

"According to an estimate made some years ago, the combined production of the leading paper-manufacturing countries in 1875, 1900 and 1925 was respectively 723,000, 4,207,000 and 12,938,000 tons. The latest figure available, that for the world-production of paper in 1929, shows a total of 16,410,000 tons. (And then adds in a footnote that "to this—1929—should be added the world's production of board, which amounted in the same year-to about 6,000,000 tons.)

Mr. Lundgren's views on production and supply are of broad interest and a few paragraphs are herewith reprinted. He remarks:

"We are now in the midst of a period when the epidemic of overproduction in the paper industry is more acute than ever, and pessimists forecast a gloomy future for both the paper and the pulp industries. How-

ever, with the return of normal times and the resumption of the upward trend of the demand for paper in the leading markets, it is safe to assume that the world will absorb quantities of paper far exceeding the present capacity of the world's paper industry. I have no doubt, on the other hand, that the problem of overproduction will arise again and again in the industry. I shall revert to the reasons for this later on.

"The supply of wood pulp may be described as relatively inelastic, that is to say, at a given productive capacity the world's wood pulp industry shows a tendency to react and adjust itself but slowly to any changes that may occur in the demand for the product. This inelasticity is particularly noticeable when a sudden decrease in demand necessitates a corresponding decrease in supply.

"In the relatively few decades during which the wood pulp industry has existed it has undergone a truly remarkable technical development, and although this development can by no means be regarded as fully completed, the main outlines of a modern pulp mill are more or less clearly defined. Thus, a pulp mill at the present day, if it is to be competitive, must be of considerable size, much capital must be invested in the plant, the machinery installed is intricate and expensive, and usually large sums have to be invested in the ownership and management of forests. Pulp production also requires an abundant supply of electric power necessitating further investments of capital for the development of hydro-electric energy. These fixed investments, combined with the burden of high maintenance and organization costs, carry with them a high ratio of irreducible overhead costs.

"The constant technical progress of the industry also makes it incumbent upon mill managements to effect changes and improvements in the production machinery, and to provide for an appreciable amount to be written off the book value of the plant each year. This factor of obsolescence is an important but often neglected item in the overhead costs of a pulp mill. It can never be eliminated, even when the plant is shut down.

"Moreover, most pulp mills are so located that, owing to climatic conditions, they are cut off during a

considerable part of the year from the supply of the chief raw material, pulp wood. In order therefore to ensure continuous operation throughout the year, pulp wood is usually stocked in large quantities near the mills. These stocks of course represent capital investments or actual purchases, which must be amortized or paid for. Even if a restriction of output is called for, the mill-owners are generally anxious, by continuing their production, to reduce the available stocks, thereby diminishing the working capital—all the more so as pulp wood, if stored for any length of time, deteriorates and decreases in value.

"A production unit working under such circumstances will naturally not be inclined to restrict its production in times of slackened demand, but will instead resort to price reductions with a view to stimulating the market. In this way a mill counts on being able to derive income from its output more or less sufficient to meet running costs and fixed charges even if this entails a slight loss. Naturally, however, when the price has been reduced to such an extent that the loss involved if the mill is kept going exceeds the amount of the fixed charges, the mill is bound sooner or later to close down.

"This does not, however, occur simultaneously in the case of all production units. The wood pulp industry, of course, is relatively young and its rapid technical development has led to wide divergences in the production costs of different mills. This variation, combined with differences in the capital resources behind the individual producers, apparently gave rise at an early stage to mutual differences of opinion amongst the various entrepreneurs as to the most suitable price

and production policy to meet changes in the cyclical conditions.

and

tion

ship

othe

infl

with

fluc

indu

It

man

his

bett

indi

phil

duc

to a

pro

tak

tion

vol

pro

oth

dec

of :

onl

pos

inte

Esp

or

Th

ma

pai

cia

tic

lea

tio

as tio

to

sa

ar

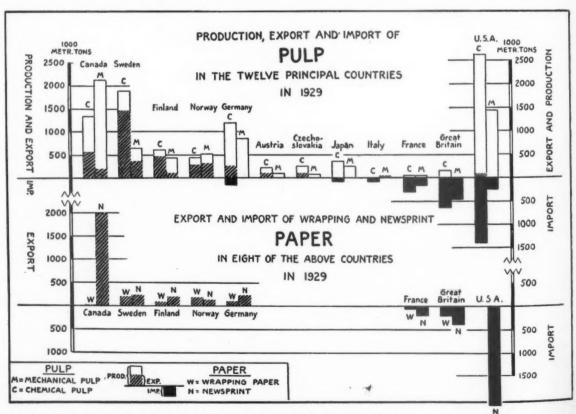
"The above observations may suffice to illustrate the difficulties that arise when it comes to restricting production. Nor is an immediate increase in production, if the industry is working at full capacity, feasible, since it takes time to erect and start a modern pulp mill. A steady demand over a period of years has, however, invariably attracted capital for extensions and fresh construction."

There is in the survey a matter-of-fact confidence that conditions, though there be turmoil now, will right themselves again and that the world will continue to use greater and greater amounts of paper. The pessimistic note is lacking. The writer declines to say "if conditions improve" and simply takes things for granted by saying:

"With the return of normal times and the resumption of the upward trend of the consumption and production of the world as a whole. . . ."

He then speculates to some extent on new paper fibre supplies that could be tapped should present pulp timber exploitation prove inadequate to the increased demand. He mentions the forests of Siberia, China, European Russia, Canada and Alaska. He mentions also the possibilities in quick-growing fibrous plants.

In discussing the demand for wood pulp the writer points out that it is of an infinitely more complicated nature than the supply. He distributes the world's paper requirements into three great classes, to-wit: (1) paper for cultural purposes, which includes news print



-Chart from "The Index", published by the Swedish Commercial Bank, Stockholm.

and printing papers; (2) paper and board for distributional purposes, which includes wrapping paper, bags, shipping containers, etc.; and (3) paper and board for other purposes, which includes the fines and specialties, etc. There follows then a discussion of the major influences which tend to increase or decrease demand with these major users, and an interpretation of these fluctuations reflect themselves upon the wood pulp industry.

al

ne

0-

n,

le,

lp

as.

nd

ce

ht

to

si-

"if

ed

p-

ro-

ılp

ed

na,

ons

ter

ted

d's

(1)

int

It is perhaps natural that Mr. Lundgren, as the key man of two great cooperative associations, should lead his survey up to a discussion of ways and means of better fitting production to consumption. He scores individual price reducing tactics as "ineffective" then offers some very homely and decidedly applicable philosophy in the following paragraphs:

#### Restrict Output

"However, granting the ineffectiveness of price reductions, the only way to meet the declining demand is to adjust the supply by a restriction of output to correspond to the reduced demand. As long as each individual producer is at liberty to decide upon his own production policy there are bound to be differences of opinion. Therefore some kind of joint action must be taken in order to exercise efficient control over production policies. Such joint action is only possible through voluntary trade cooperation or through a merger of all producers. In the wood pulp industry, as in so many other basic world industries, there have for several decades past been instances not only of the formation of mergers but also of voluntary trade cooperation, but only recently, and then in isolated cases, has it been possible to arrive at uniform production policies on an international basis.

"Each consecutive period of reduced demand and intensified competition has led to the undermining of the financial standing of a large number of mills. Especially is this true of such mills as for one reason or another are working on a small margin of profit. The control over such mills has then been turned over to the institutions supplying the working capital, or to their more fortunately situated competitors. Of course many mergers have been effected because of the apparent advantages of joint operation. In the great majority of instances, however, I believe that the mergers have been brought about only after the need of financial reorganization and recapitalization has become imperative."

#### Trade Cooperation

The most satisfactory solution is seen by the writer in trade cooperation, but he points to some very practical difficulties standing in the way of that end. He leaves the reader with a note of warning.

"The most important function of the pulp associations in the future will undoubtedly be that of serving as a controlling organization to deal with such restrictions of output as may be decided upon for the purpose of avoiding excessive price-fluctuations. In order to be able to effect a fool-proof international agreement on the restriction of production, it will be necessary first of all to have established effective national organizations with sufficient influence over their members to exclude the possibility of anyone's jeopardizing the success of the international agreement.

"It is to be hoped therefore that the present hard times will convince pulp manufacturers of the importance of effective cooperation, and that such cooperation will be established without delay."

#### IN JAPAN A MERGER

—of the three largest paper manufacturers, the Oji Seishi, the Fuji Seishi and the Karafuto Kogyo, seems to be materializing for the immediate future. The new merger company, if established, will be the second largest industrial company in Japan, the first being the Tokyo Electric Light Company, capitalized at 345,000,000 yen (\$172,000,000 at par exchange).

The matter has been pending for years, but the unsatisfactory financial status of the Karafuto Kogyo Kaisha was one of the main difficulties. However, adjustment has since made much progress, while the recent slump in the yen has made imports prohibitive. This is considered the most opportune time for these concerns to carry out their merger.

The Oji paper mill has already a controlling interest in the Fuji mill, and the only question is an agreement between the Oji mill and the Karafuto Kogyo Kaisha. Recently Mr. Fujiwara, president of the Oji company, interviewed Mr. Okawa, president of the Karafuto

interviewed Mr. Okawa, president of the Karafuto Kogyo Kaisha. Mr. Abe, chairman of the Japan Cotton Spinners' Association, is an auditor of the Karafuto Kogyo, and has also discussed the matter with Mr. Okawa.

It is learned that these gentlemen welcome an immediate merger, and that arrangements are being made for Mr. Fujiwara and Mr. Okawa to make an inspection trip to Hokkaido and Karafuto (South Saghalien). The only difficulty is how to fix the new capital of the new merger company, and it is hoped that this matter will be settled in the immediate future. In case of necessity their banks will be asked for assistance.

The following are the financial situations of the three firms as at the end of last year. Oji Mill: Capital, 65,916,000 yen; capital paid up, 48,683,000 yen; debentures and loans, 60,476,000 yen; reserves, 21,363,000 yen; dividend last term, 8%. Fuji Mill: Capital, 77,700,000 yen; capital paid up, 58,925,000 yen; debentures and loans, 78,900,000 yen; reserves, 10,000,000 yen; dividend last term, 4%. Karafuto Mill: Capital, 70,000,000 yen; capital paid up, 53,627,000 yen; debentures and loans, 49,176,000 yen; reserves, 20,000,000 yen; dividend last term, nil.

The share quotations on the Tokyo Exchange on August 23rd were 79 yen for the Oji mill, 44 yen for the Fuji mill and 29 yen for the Karafuto mill. These prices show rises of 5 to 6 yen in the past week or two.

A certain influential director of the Oji mill is quoted by the Japanese press as saying that the merger talk has been going on for nearly four years. Now that financial and business conditions of all parties have changed and are suited for a merger, the matter presents a bright prospect.

Mr. Okawa, president of the Karafuto Kogyo Kaisha, says that the merger will enable Japanese paper mills to control production and sales and halt imports which today amount to 10,000,000 pounds a year. In exercising production restriction, he added, they can suspend mills with low efficiency and high production costs.

#### J. A. KIMBERLY MEMORIAL

—building at the Institute of Paper Chemistry, Appleton, Wisconsin, will be dedicated with appropriate exercises on Wednesday, September 21st. The institute is the tangible result of mutual effort on the part of a number of far-seeing executives in the paper industry who visualized the wisdom and value of founding a central institution for promoting the technique of pulp and paper manufacturing. The J. A. Kimberly memorial building will preserve to posterity one of the names best known in the industry.

## IN CANADA-

#### pulp and paper manufacturing is most important

THE pulp and paper industry is the most important manufacturing industry in Canada; heading the lists in 1931 for gross and net values of manufactured products as well as for distribution of wages and salaries. In total capital invested the industry is second only to electric light and power plants and in total number of employees it is second only to saw-mills. A preliminary report on the pulp and paper industry in Canada for the calendar year 1931 has just been issued by the Forestry Branch of the Dominion Bureau of Statistics.

The industry has headed the lists in wage and salary distribution since 1922, when it replaced the saw-mills in this respect and it has been first in gross value of products since 1925, exceeding the gross value of flour mill production. In these comparisons, only the manufacturing stages of the pulp and paper industry are referred to, no allowance being made for the capital invested, the men employed, the wages paid nor the products of the operations in the woods which form such an important part of the industry as a whole. Operations in the woods are dealt with in reports on primary forest production owing to the difficulty of separating the production of pulpwood from the production of saw-logs and other primary forest products.

Considering only the manufacturing aspect of the industry, the gross value of production in 1931 was \$174,733,954, a decrease of 19% over the figure for 1930. The gross values of the manufactured products of the industry for the last five years are as follows:

#### Gross Production

| 1927 | <br>8219,329,753 |
|------|------------------|
| 1928 | 233,077,236      |
| 1929 | <br>243,970,761  |
| 1930 | <br>215,674,246  |
| 1931 | <br>174,733,954  |

This gross value represents the sum of the values of pulp made for sale in Canada, pulp made for export and paper manufactured. It does not include pulpwood nor the pulp made in combined pulp and paper mills for their own use in making paper.

The net value of production is one of the best indications of the relative importance of a manufacturing industry. It represents the difference between the values of raw materials and finished products. In the pulp and paper industry it is obtained by subtracting from the gross value of production, as described above, the sum of the values of pulpwood and chemicals, etc., used in pulp-making and pulp, chemicals, etc., used in paper-making. The pulp made in combined pulp and paper mills for their own use in paper-making is con-

sidered as a stage of manufacture and is not included either as a product of the pulp mill or a raw material of the paper mill. the of was

of to cap tot

em

pa 61 4,0 dia co St

ex

un

of 12

tic

ca \$3 at

partition of the partit

b P Pf Pf in in to

With regard to the net value of production the pulp and paper industry has headed the lists since 1920, when it replaced the saw-mills. The net value of production for the last five years was as follows:

#### **Net Production**

| 1927 | **************************************  | 8134,516,673 |
|------|---|--------------|
| 1928 | **************************************  | 144,586,815  |
| 1929 | *************************************   | 147,096,012  |
| 1930 | *************************************** | 133,681,991  |
| 1931 |   | 110,786,276  |

If operations in the woods are taken into consideration, the total value to Canada of the industry as a whole may be considered as the sum of the values of pulpwood and pulp exported and the gross value of paper products. This removes any duplication that might arise by the inclusion of pulpwood used in Canadian pulp mills, and pulp used in Canadian paper mills but makes no allowance for pulp that might be used in Canada for purposes other than the manufacture of paper, such as the manufacture of artificial silk, fibreware, etc. This total in 1931 amounted to \$183,373,499, a decrease of 19% over 1930.

There was a net loss of six establishments in the industry as a whole from 1930 to 1931, distributed as follows: one pulp mill and two combined pulp and paper mills closed down in New Brunswick; two mills in Ontario which made pulp and paper in 1930 made pulp only in 1931 and two combined mills closed down; one pulp mill in New Brunswick closed down.

The 75 mills manufacturing pulp produced 3,167,960 tons valued at \$84,780,819 as compared to 3,619,345 tons in 1930 valued at \$112,355,872, representing a decrease of 10% in quantity and 24.5% in value. Of the total for 1931 the combined pulp and paper mills produced 2,423,300 tons valued at \$54,004,119 for their own use in paper-making. A total of 94,172 tons valued at \$3,864,000 were made for sale in Canada and 650,488 tons valued at \$26,912,690 were made for export.

The 71 mills making paper in 1931 produced 2,611, 225 tons of paper valued at \$143,957,264 as compared to 2,926,787 tons in 1930 valued at \$173,626,383, a decrease of 10.78% in quantity and 17.1% in value.

crease of 10.78% in quantity and 17.1% in value. Newsprint paper made up 85.3% of the total reported tonnage of paper manufactured in 1931. The newsprint amounted to 2,227,052 tons valued at \$111,419,637, as compared to 2,497,952 tons in 1930 valued at \$136,181,883, a decrease of 10.8% in tonnage and

9.7% in total value. The Canadian production of standard newsprint was 91.9% greater than that of the United States during 1931. For the first six months of 1932 the Canadian output of standard newsprint was estimated at 999,885 tons, or 82.9% greater than that of the nearest competitor, the United States.

The total capital invested in the manufacturing part of the indusry in 1931 was \$630,176,540, as compared to \$714,437,104 for 1930, a decrease of 11.8%. Only capital invested in operating mills is included in these totals.

The total number of employees on salaries and wages in pulp and paper mills in 1931 was 26,669 and the total payroll was \$34,792,013 as compared to 33,207 employees in 1930 with salaries and wages amounting to \$45,774,976.

ded

ulp

20,

oro-

3

5

2

1

6

era-

is a

of

of

that

ana-

per

be

facicial

l to

d as

and nills nade own;

,960

,345

de-

Of

nills

for

tons and

for

611,-

ared

de-

re-

The

111,-

lued

and

The apparent total production of pulpwood in 1931 was 5,046,291 cords valued at \$51,973,243 as compared to 5,977,183 cords in 1930 valued at \$67,529,612. Of the total production in 1931 about 81% or 4,088,988 cords were manufactured into pulp in Canadian pulp-mills while the remaining 19% or 957,303 cords valued at \$9,359,592 were exported to the United States. These figures show a decrease from 22.3% in 1930 to 19% in 1931 in the proportion of pulpwood exported and the total quantity of pulpwood exported unmanufactured also shows a decrease. The quantity of pulpwood used in Canadian mills has decreased by 12.5% during this period. There was a small importation of pulpwood into Canada.

The total value of all materials going into the manufacture of pulp in 1931 was \$50,644,699 and the total value of all pulp produced, including that made in combined pulp and paper mills for their own use was \$84,780,819.

The total value of all materials used in the manufacture of paper in 1931 including pulp made in combined establishments for their own use was \$67,316,-215; the total value of paper and miscellaneous pulp products manufactured was \$143,957,264.

The exports of wood-pulp from Canada during the calendar year 1931 amounted to 622,537 tons valued at \$30,056,643 as compared to 760,220 tons in 1930 valued at \$39,059,979. During 1931 the imports of wood-pulp were 14,418 tons valued at \$592,904.

The exports of paper and paper goods during the calendar year 1931 were valued at \$111,114,042 as compared to \$138,440,242 in 1930. These exports were made up chiefly of newsprint paper of which 2,008,240 tons valued at \$107,233,112 were exported chiefly to the United States. Canada's exports of newsprint are now second only to her exports of wheat and are greater than the newsprint exports of the rest of the world. The 1931 exports represent a decrease in quantity and in total value over the 2,331,010 tons valued at \$133,280,932 which were exported in 1930. During 1931 the total value of paper and paper goods imported was \$9,585,986, a decrease from the imports for 1930.

The gross contribution toward a favorable trade balance resulting from the activities of the pulp and paper industry as a whole in 1931 amounted to approximately \$139,844,298 being made up of the difference between the value of pulpwood exported and pulpwood imported amounting to \$8,852,503, the difference between the value of pulp exported and pulp imported amounting to \$29,463,739, and the difference in value between paper exports and imports amounting to \$101,528,056. The total for 1930 was \$176,506,583.

#### CANADA'S PULP EXPORTS INCREASED

—in July, as compared with June, 1932, but the total for the month was less than the corresponding period of a year ago, according to official figures issued by the Dominion Bureau of Statistics of the Canadian Department of Trade and Commerce.

Total exports of chemical and mechanical pulps from the Dominion in July reached 32,926 net tons, valued at \$1,339,558, comparing with 29,858 tons of a value of \$1,296,166 exported in June this year, and 48,377 tons of a value of \$2,475,628 in July, 1931. Exports to the United States in July were 22,002 tons of a value of \$941,231 of all grades of pulp.

Shipments of bleached sulphite from Canada in July amounted to 14,128 tons of a value of \$728,699, compared with 24,004 tons of a value of \$1,506,419 a year ago, while exports of unbleached sulphite were 4,325 tons of a value of \$141,030, against 10,021 tons of a value of \$436,935 last year, and of kraft pulp 3,147 tons of a value of \$209,231, against 3,199 tons of a value of \$222,400 a year ago. Mechanical pulp exports were 10,906 tons in July, valued at \$254,639, compared with 9,827 tons of a value of \$274,622 last year.

#### CROWN WILLAMMETTE EARNINGS

—for the first quarter of the new fiscal year were substantially lower than a year ago, according to a statement issued recently. For the three months ended July 31, 1932, the balance of profit accruing to Crown Willamette Paper Company stockholders was \$279,475 (cents omitted) as compared with \$856,957 for the same months of 1931. The company's chief operating properties are paper mills at Camas, Washington, and West Linn and Lebanon, Oregon. It also holds a controlling interest in the British Columbia mill, Pacific Mills, Ltd. Following is a summary of the consolidated profit and loss statement:

Crown Willamette Paper Company and Subsidiaries (Including Pacific Mills, Limited, a Canadian Company) Summary of Consolidated Profit and Loss. Three Months Ended July 31, 1932, and July 31, 1931

|           | 1952, and July 51, 1951   |
|-----------|---|
| 1022      | (Cents omitted)   |
|           | Profit excluding profit on Comapnies'<br>own bonds, purchased for redemp-<br>tion, and before depreciation, de-<br>pletion, bond interest and U. S. and<br>Canadian income taxes. |
| 1,770,717 | Canadian income taxes   |
|           | Deduct:   |
| 671,546   | Depreciation  |
| 115,715   | Depletion   |
| 307.733   | Bond interest   |
| 70,377    | U. S. and Canadian income taxes   |
| 1,165,373 | Total deductions  |
|           | Profit before deduction of interest of  |
| 283,142   | minority stockholders   |
|           | Less: Minority stockholders' interest in  |
| 3,666     | profits of Pacific Mills, Limited   |
| 279,475   | Balance of profit accrued to Crown<br>Willamette Paper Company stock-<br>holders  |
|           | 671,546<br>115,715<br>307,733<br>70,377<br>1,165,373<br>283,142<br>3,666  |

#### FREDERIC MORGAN

—traffic manager of the Zellerbach Paper Company and assistant traffic manager of the Crown Zellerbach Corporation, died at San Francisco in August, following an illness of several months. In 1926 Mr. Morgan was president of the Pacific Traffic Association and at the time of his death was vice-president of the Industrial Traffic Club.

## T.R.A.D.E • T.A.L.K

of those who sell paper in the western states

+ + + +

#### PROMPT ACTION BY IMPORT COMMITTEE

—of the American Paper Industry was taken to check what is believed to be unfair competition in the importation of kraft wrapping paper and M. G. Sulphite, being offered by Swedish mills at very low prices. "Complaint of undervaluation has already been made

"Complaint of undervaluation has already been made to the government officials," said Warren B. Bullock, manager of the committee, "and a complaint of dumping will follow immediately. The foreign paper is being offered at such low prices that it does not seem possible that the prices can be quoted with the payment of proper customs duties.

"The particular cases in which action is being taken are offerings of Swedish kraft wrapping paper offered at \$2.75, and of Swedish machine glazed sulphite, offered at \$3.25. If these quotations were correct, the Swedish mills would be receiving hardly more than what would be a fair price for newsprint."

#### RODMAN C. PELL

—president of the Pelican Paper Company, San Francisco paper jobbers, is expected home September 26 aboard the steamer "Monowai" from his fifth of sixth jaunt to the South Seas. He left San Francisco, with Mrs. Pell, July 6 and has been idling the time since at the city of Papeete on the Island of Tahiti. "Idling" may not be the proper word, for J. A. Watson, sales manager of the Pelican company, says Mr. Pell has developed a good business among the south sea islanders.

Mr. Watson, who runs the company when Mr. Pell goes south seaing, reports that business is holding up. "People don't buy as readily as formerly," he says, "commodity prices are down but our tonnage is holding up. We haven't reduced salaries and we still keep eight salesman out, because, after all, the salesman is the backbone of any business."

#### **MARCUS ALTER**

—San Francisco, president Commercial Paper Corporation, says there was a steady increase in business during July and this extended into August. The July increase was seasonal and was expected, but the August improvement was an unexpected improvement.

The Commercial Paper Corporation this year has been making headway, slowly but surely, Mr. Alter says. Recently they issued an attractive leather-covered, loose-leaf indexed catalog for their customers and also got out new sample cabinets.

#### R. C. CLARK

—has been named general sales manager of the Los Angeles division of the Zellerbach Paper Company, a new position created to coordinate the sales activities of the southern unit. Mr. Clark, who formerly was with the Fresno office of the Zellerbach company, recently has been working from the San Francisco head-quarters on special sales an doperating problems.

#### LINCOLN OLDER

—assistant to Earl Van Pool, Pacific Coast manager for The Brown Company, pulp and paper manufacturers, recently moved back to San Francisco from Los Angeles, where he had spent close to two years in charge of the firm's southern office in the Bendix Building. The Los Angeles offices have been given up as it is the belief of the firm that more effective work can be done by centering activities at San Francisco.

Mr. Older reports that the firm recently issued a handsome new folder showing all of its various lines. He also gives out the interesting news that Brown's leather substitutes, made from cellulose, are steadily gaining favor among Pacific Coast shoe manufacturers.

sid

sar

qu

fac

ing

sai

sib to

ch

de profession minimus so

qu th tie

cc st oi ir o c q w si n e si n

The Brown people make, from cellulose, the insoles, counters, upper materials, trim materials and box toes for shoes—almost everything but the soles. They offer more than 100 designs in various imitation reptile skins. The shoe lines are manufactured by Brown at a plant at Danvers, Mass., in the heart of the New England shoe industry. The main office of the Brown company is at Portland, Maine, and its principal plant at Berlin, N. H.

#### WILLIAM R. LENDERKING

-vice-president and general manager of the Lily-Tulip Corporation, visited the Pacific Coast in August, spending some time in Los Angeles and later in San Francisco. On the coast he conferred with Webb Plass, western sales representative of the company. The Lily-Tulip line is handled in the west by the Zellerbach Paper Company; The Johnson, Locke Mercantile Company; and Johnson, Carvell & Murphy.

#### HAROLD L. ZELLERBACH

—San Francisco, president of the Zellerbach Paper Company and the Pacific States Paper Trade Association, was in the east in August attending a conference of Hammermill Paper Company agents and the group meeting of the S. D. Warren Company. He spent some time also at the Carthage, N. Y., plant of the National Paper Products Company.

#### DON S. LESLIE

—assistant sales manager of the Hammermill Paper Company, was out from Erie, Pennsylvania, in July and August. He visited the Grays Harbor Pulp and Paper Company mill at Hoquiam, Washington, was in San Francisco and Los Angeles and flew from the latter city to Chicago.

#### FRED WEUNSCHEL

—San Francisco, Pacific Coast sales manager of the Hammermill Paper Company and the Grays Harbor Pulp and Paper Company, was at the Hammerill plant in Erie, Pennsylvania, in August attending the annual conference of that firm's agents.

## SAMPLE STANDARDIZATION -

... a forward step is discussed with the sales department of the Crown Willamette Paper Company

SAMPLING has incessantly been a "thorn in the side" of both the paper manufacturer and the paper merchant. Notwithstanding its inherent difficulties, sampling is absolutely essential in order to maintain with the trade a continuing familiarity with the standard qualities of paper mill products.

for

rers,

ing.

d a

wn's

dily

rers.

oles.

toes

fer

cins.

lant

land

oany

rlin,

ulip

end-

isco.

ulip

aper

any;

aper

ocia-

ence

roup

ome

onal

aper

and

aper

San

atter

the

rbor

plant

nual

The manufacturer's difficulty lies principally in the fact that he is continuously improving the qualities of his products so as not to lag behind competitive offerings. This condition makes the issuance of a completed sample booklet displaying all grades virtually impossible from an economic standpoint; hence the tendency toward distributing booklets, pamphlets and broadsides of all forms and sizes. This leads directly to the merchants troubles regarding samples. He cannot be expected to file samples if they range in size from that of a newspaper down to a few inches in dimension.

The Crown Willamette Paper Company has recently devoted much time toward a practical solution of this problem. They found that only a very small percentage of odd size sample pieces were actually filed by the merchant and retained for reference. This means that most of the time and money involved in the offering of irregular advertising matter was time and expense lost so far as standard grades were concerned.

Specialty grades are not being discussed as they require advertising of an entirely different nature than the advertising of the mills' standard items of production.

In order to prevent the necessity of replacing an entire booklet merely because one or two grades had been changed, they adopted the following plan:

Each standard grade of paper was classified in accordance with its subsequent use. Kraft wrappings constituted one swatch, sulphite and manila wrapping another, and so on through envelope paper, tissues, printing papers and butcher papers. Each standard weight of the various grades coming under the general classification was incorporated into the swatch. The various qualities of the type of paper the swatch contained were "staggered" for convenience in selection. On the small margin left by "staggering" was printed the grade name and basis weight. It was necessary to make several seperate swatches to complete the sampling of their standard grades of paper, and by doing this they eliminated the necessity of replacing the entire swatch to

sample a change in any one of the grades had the entire line been incorporated in one swatch.

Both Napkins and Toilet Tissues have separate folders. For every standard type of grocery bag and odd bag, there is an individual folder. Each grocery bag folder contains one bag representative of each range of basis weights. The odd bag folder contains several bags so as to demonstrate sizes from the smallest to the largest.

To complete the whole line and a supplement to the bag folders, they prepared a booklet to show every printing design, type style, borders, and ink colors available for use in the printing of bags and wrapping papers.

The individual swatches offered a convenience in filing. All qualities of one type of paper may be selected from the files and immediately referred to without thumbing through a large complicated book. This method has been standardized throughout the entire line of their products.

Every detail was considered in the preparation and design of these folders. They were made in size  $9\frac{1}{2}x$   $11\frac{1}{2}$  over-all so that a standard filing cabinet drawer would accommodate them. The entire group takes up only approximately one-third the space of an ordinary filing drawer.

The front of the cober comes within a half inch of the edge so that the sample number and grades contained therein could be plainly printed so as to facilitate reference when filed.

The covers were made from an attractive heavy weight manila envelope stock in order to withstand constant use. These covers were effectively printed in modern type—the same design being used on the entire group. None of the folders contain superfluous advertising material that once read (if at all) would be discarded. The only copy they contain is important information regarding quality, grade names, basis weights and packing specifications.

This method of sampling has given satisfaction and the Crown Willamette Paper Company believes it to be a step forward in the standardization of samples. Much planning and experimenting was involved in the preparation of these folders, but from the many compliments received, it is evident that they are serving a useful purpose.

#### Crown Willamette Paper Company's

## CAMAS MILL

#### Establishes Enviable SAFETY RECORD

NE thousand and twenty-one paper mill employes brought through 65 days without a single lost time accident. Reduction by 76% of wages lost through accident. Reduction by 85% of compensation paid to employes injured and laid off.

These are some of the records which the Camas mill of Crown Willamette Paper Company has hung up this

The mill went from June 20, 1932, to August 25, 1932, without one lost time accident. And then somebody dropped something.

Here are some statistics of the SAFETY record of which the Camas mill and its crew are proud. First, we compare the accident records of the first seven months of 1932, as follows:

Over these seven month periods, there was one accident for each 14 men employed in 1930, one for each 31 men employed in 1931 and one for each 57 men employed in 1932. In 1930 the accident loss in time and wages per employe was 1.62 days and \$5.49; in 1931, 1.21 days and \$6.82; in 1932, only .44 (44/100ths) day and \$1.88.

It is well to note here that the 1931 figures reflect one fatal accident with \$6000 in compensation paid out in one lump sum.

Compensation paid out per employe in 1930 was \$4.23; in 1931, \$9.33, eliminating the one fatality, \$4.20; in 1932, \$1.57.

It will be noticed that in 1932 the medical outlay rose rather than fell. A certain fixed amount is paid out by the company and the employes per employe regardless of sickness or injury experienced, and it is pointed out that the increase this year might well indicate that the men were being induced to a greater extent to go to the dispensary for minor injuries that, were they not attended to, might have grown into lost time accidents.

Medical aid expenditures per employe were \$5.94 in 1930; \$5.23 in 1931 and \$6.28 in 1932.

In 1930 each lost time accident cost on an average 23.3 days lost time; in 1931, 37.8 days time; in 1932, 25.5 days time.

The SAFETY organization of the Camas mill, designed to educate the employes to be "SAFETY minded" heads up in a central SAFETY committee of four members: the plant engineer, the SAFETY supervisor and two superintendents of departments. Under this is a workmen's general committee of 40 members—men and women—representing each department in the mill.

Meetings are held one day every two weeks at 1 p. m. and all members draw pay for attendance. All suggestions made are taken up by the central committee for approval or disapproval. Department heads, other than SAFETY committee members, are called to talk at each meeting. Each SAFETY committee member wears a big badge lettered "SAFETY COMMITTEE—CAMAS MILL". All committee members are instructed to contact all employes in their departments and to report immediately all unsafe practices and hazards.

The SAFETY supervisor makes daily trips through the mill, contacting every employe and committee memher possible

The Camas mill, in common with all the Crown Willamette mills in the territory, has membership in the National SAFETY Council and follows its SAFETY practices.

Good housekeeping is stressed throughout the plant—clean floors and windows, bright lights. "Neatness, cleanliness and order are insisted upon in every part of the mill," says the SAFETY supervisor, M. W. Kincaid. "A grease spot on the floor is a disgrace; a leaky pipe, an error.

"Competition is keen between departments as to production, quality, cleanliness and SAFE working. Our employes realize that a clean mill is more cheerful and SAFE to work in. The reaction to this shows in more production of the best quality and less accidents."

GIGEONRIVELEN

|      | Average<br>Number<br>Employed | Lost<br>Time<br>Acci- | Days<br>Time |
|------|-------------------------------|-----------------------|--------------|
|      | Daily                         | dents                 | Lost         |
| 1930 | 1617                          | 112                   | 2613         |
| 1931 | 1170                          | 38                    | 1420         |
| 1932 | 1021                          | 18                    | 459          |

| Wages<br>Lost<br>\$8875.35 | Medical Aid,<br>Hosp. Charges,<br>& Doctor's Fees<br>\$9607.93 | Compensation<br>Paid Employees<br>Inj. & Laid Off<br>\$ 6933.30 |
|----------------------------|--|---|
| 7982.50                    | 6124.70  | 10917.35  |
| 1919.48                    | 6411.17  | 1602.93   |
|                            |  |   |

## $S \cdot A \cdot F \cdot E \cdot T \cdot Y$

RD

rage 932,

de-

ind-

four

visor this

men

mill.

o. m.

sug-

ittee ther

lk at

rears EE-

ruct-

d to

ough

nem-

Wil.

the ETY plant ness, part

Kineaky

s to king. erful vs in nts."

on ees )ff

be careful - first, last, always

#### PORT ALICE BRINGS THE SHIELD HOME

Somewhat more than a year ago the B. C. Pulp & Paper Co., Ltd., proposed to the pulp and paper mills of the Western Canadian province that they engage in a contest for the best SAFETL record. The company offered a handsome shield as a trophy to go to the winning mill.

Having proposed the contest with the motivating idea that SAFETY work can be improved by injecting the competitive element, it was fitting that the company's two mills should set out to demonstrate the practical application of this theory by winning the first two places in the contest.

The competitive period covered one full year, from June 1, 1931, to May 31, 1932. The contest was conducted by the Workmen's Compensation Board, and that body has now advised the participants of the following final results:

- 1. B. C. Pulp & Paper Co., Ltd., Port Alice, B. C., one day lost in every 2077 hours worked.
- 2. B. C. Pulp & Paper Co., Ltd., Woodfibre, B. C., one day lost in every 670 hours worked.
- 3. Powell River Company, Ltd., Powell River, B. C., one day lost in every 409 hours worked.
- 4. Pacific Mills Limited, Ocean Falls, B. C., one day lost in every 161 hours worked.

#### PULP AND PAPER MILLS IN THE STATE OF WASHINGTON Statement of Accident Experience for July, 1932

| Company—                                    | Hours Worked | Total<br>Accidents | Frequency Rate | Days Lost | Severity Rate | Standing |
|---|--------------|--------------------|----------------|-----------|---------------|----------|
| Grays Harbor Pulp & Paper Corp., Hoquiam    | 38,910       | 0                  | 0              | 0         | 0             | 1        |
| Inland Empire Paper Co., Millwood           | 41.367       | 0                  | 0              | 25        | .604          | 2        |
| Crown Willamette Paper Co., Camas           | 161.314      | 0                  | 0              | 100       | .620          | 3        |
| Everett Pulp & Paper Co., Everett           | 55.045       | 1                  | 18.2           | 47        | .854          | 4        |
| Solution River Paper Mills, Vancouver       | 57.070       | ī                  | 28.1           | 6,000     | 168.303       | Š        |
| National Paper Products Co., Port Townsend  | 60,572       | 2                  | 33.0           | 51        | .842          | 6        |
| Rainter Pulp & Paper Co., Shelton           | 29.076       | ī                  | 34.4           | 25        | .860          | 7        |
| Washington Pulp & Paper Corp., Port Angeles | 51,208       | 2                  | 39.0           | 20        | .390          | 8        |
| Pacific Straw Paper & Board Co., Longview   | *48,400      | 3                  | 62.0           | 17        | .351          | 9        |
| Longview Fibre Co., Longview                | 82,492       | 7                  | 84.9           | 67        | .812          | 10       |
| Puget Sound Pulp & Timber Co., Bellingham   | 26.376       | 3                  | 113.7          | 96        | 3.640         | 11       |
| Weyerhaeuser Timber Co., Longview           | 32,607       | 4                  | 122.6          | 21        | .644          | 12       |
| ribreboard Products Inc., Sumner            | 21.844       | 3                  | 137.3          | 17        | .778          | 13       |
| Fibreboard Products Inc., Port Angeles      | 20,208       | 3                  | 148.5          | 35        | 1.732         | 14       |

\*Including July Adjustment.

The following mills did not report: Pacific Coast Paper Mills.

The following mills were not in operation: Puget Sound Pulp & Timber Co., Everett; Everett Pulp & Paper Co. (West Tacoma plant); Tumwater Paper Mills; St. Regis Kraft Co.; Puget Sound Pulp & Timber Co., Anacortes; Shaffer Box Co.

#### **ECONOMIES EXPECTED**

—to reduce operating expenses of the Hawley Pulp & Paper Company plant at Oregon City \$250,000 a year have recently been effected by the management and by the bondholders' protective committee with the full co-operation and approval of the directors and management.

Among these economies are sharp reductions in salaries and wages, believed to be around 20 per cent, and a change in the power contract, so that the mill is not obligated to take so much power. Under the new contract all the machines cannot be operated at one time within the peak load.

Along with salary and wage reductions, some men have been taken off the salary roll and put on straight time and there have been a number of eliminations.

The bondholders' protective committee reports that, "Insofar as these economies have been effected by the reduction of wages and salaries, your committee is pleased to report a general acceptance by the employes and an appreciation by them of the existing economic conditions requiring such reductions."

"With the economies thus far effected and those anticipated," says the committee, "only a slight improvement in sales will enable the company to meet its fixed charges and to provide nearly, if not quite all, its annual depreciation of approximately \$279,000 a year. For a number of months the plant has been running at approximately 50% capacity, and with the restoration

of normal business conditions promoting increased out-

put and sales, your committee believes the company can be restored to profitable operation."

By provisions of a deed of trust given by the Hawley company to The Bank of California, National Association, trustee, in 1926 company bonds are to be retired at the rate of \$134,000 annually. Because of the difficulties involved in meeting this sinking fund under present conditions the committee has advised waiver of this redemption for 1933, 1934 and 1935.

"If relieved of sinking fund requirements for the three years mentioned, your committee believes the present default in the payment of interest coupons can be remedied and that future interest coupons can be paid as they become due. If bondholders holding in the aggregate 67 per cent of the bonds now outstanding agree to such waiver of sinking fund, the directors of the company are pledged to your committee to provide for the immediate payment of the coupons due July 1, 1932."

The bondholders are to deposit their bonds with the Bank of California.

#### PRODUCTION OF PAPER

—was approximately 13% below the level of the corresponding six months of last year and inventories were 3% smaller than a year ago, according to identical mill reports to the Statistical Department of the American Paper and Pulp Association. All major grades showed decreases. Production was fairly close balance with demand in most grades as evidenced by the fact that almost all stocks were below last year's level.

During the first half of 1932, manufacture in both the so-called cultural and mechanical grades was below the corresponding 1931 records; the mechanical grades, board, wrapping, etc., however, sliding off at the faster rate. This is contrary to the usual order for the mechanical grades are ordinarily more stable. The decrease in the cultural grades reflected the continued but now more gradual decline in advertising and printing.

For the first six months of 1932 the production of wood pulp was approximately 14% below the level of the first six months of 1931, according to identical mill reports. Both the amount of pulp consumed by producing mills and the amount shipped to the open market showed substantial decreases from a year ago, the former being 12% below the level of the first half of 1931 and the latter about 24% less. Shipments of soda pulp to the open market were 42% smaller than for the first six months of 1931, while shipments of news grade sulphite and groundwood diminished between 37 and 39%. Shipments of bleached sulphite to the open market were 33% smaller. Kraft pulp was the only individual grade showing greater shipments to the open market during the first half of 1932 as compared with the preceding year, the amount, however, consumed by producing mills was 18% less than during the first half of 1931.

AFT

-in

varie

prac

prov

Che

in 1

peri

min

the

its 1

cess

tice

Pat

hav

Co.

hyd

fro

tha

ing

SO

cor

cen

int

ber

Me

gai

for

Ca

co

sce

Sie

me

tio an

in

be T

> ga A th

> > Sife

G

- h in in b P

F

1

W

At the end of June, stocks of pulp on hand at producing mills were below the level of a year ago in the case of groundwood, kraft and soda pulp; kraft pulp was almost 40% below the inventory level of a year ago. All the other grades showed increases in inventories.

REPORT OF PAPER OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF JUNE, 1932

| GRADE                          | Production | Shipments | Stocks on Hand<br>End of Month—<br>Tons |
|--------------------------------|------------|-----------|---|
| Newsprint                      | 85,399     | 84,255    | 35,502                                  |
| Book Uncoated                  | 58,175     | 56,455    | 44,252                                  |
| Paperboard                     | 133,097    | 130,720   | 60,387                                  |
| Wrapping                       | 28,376     | 29,033    | 40,774                                  |
| Bag                            | 6,754      | 6,615     | 5,823                                   |
| Writing, etc.                  |            | 18,354    | 43,947                                  |
| Tissue                         | 6,357      | 6,290     | 7,231                                   |
| Hanging                        | 2,949      | 2,194     | 4,895                                   |
| Building                       | 3,925      | 3,397     | 3,893                                   |
| Other grades                   | 14,462     | 12,946    | 17,555                                  |
| Total All Grades, June, 1932   | 357,070    | 350,259   | 264,259                                 |
| Total All Grades, 6 Mos., 1932 | 2,364,113  | 2,363,531 | 264,259                                 |
| Total All Grades, 6 Mos., 1931 | 2,705,664  | 2,703,533 | 272,298                                 |

REPORT OF WOOD PULP OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF JUNE, 1932

| GRADE                          | Production | Used During<br>Month—Tons | Shipped During<br>Month—Tons | Stocks on Hand<br>End of Month—<br>Tons |
|--------------------------------|------------|---------------------------|------------------------------|---|
| Groundwood                     | 60,094     | 62,562                    | 1,437                        | 67,542                                  |
| Sulphite, News Grade           | 22,501     | 21,144                    | 806                          | 7,781                                   |
| Sulphite, Bleached             | 16,062     | 14,883                    | 814                          | 3,272                                   |
| Sulphite, Easy Bleaching       | 1,297      | 1.344                     | 21                           | 1,200                                   |
| Sulphite, Mitscherlich         | 4,234      | 1,885                     | 1,962                        | 2,533                                   |
| Kraft Pulp                     | 20,801     | 15,709                    | 5,060                        | 3,592                                   |
| Soda Pulp                      | 11,616     | 9,426                     | 1,739                        | 2,802                                   |
| Other Grades                   | 184        | 210                       | 38                           | 163                                     |
| Total All Grades, June, 1932   | 136,789    | 127,163                   | 11,877                       | 88,885                                  |
| Total All Grades, 6 Mos., 1932 |            | 866,002                   | 77,435                       | 88,885                                  |
| Total All Grades, 6 Mos., 1931 | 1,107,029  | 981,894                   | 101,175                      | 94,345                                  |

#### SUIT TO RECOVER

—\$1,320,501.34 alleged to have been overpaid the government in income taxes in 1929 has been filed in the United States District Court by the Crown Willamette Paper Company. The action is directed against John P. McLaughlin, collector of internal revenue.

#### THE FIR-TEX MILL

—after operating for twelve days straight, 24 hours a day, at the end of July and the beginning of August, shut down again. In that time 2,500,000 feet of building board was produced as well as a supply of one-inch roof insulation to round out stocks. There is no indication when it will resume.

#### AFTER THREE YEARS OF EXPERIMENTATION

—in laboratory and mill with the bleaching effect of various chemical reducing agents on groundwood, a practical and efficient process which is a distinct improvement over previous methods has been evolved by the technical staff of the Great Western Electro-Chemical Co.

en

of

of

oe-

to

ras

to

m-

er,

ng

lp

ar

S

End of Month-

he

tte

hn

ch diWith the process, all cooking of groundwood pulp in various bisulphite liquors is eliminated; retention periods of 18 to 24 hours for suitable bleaching action is reduced in the Great Western method to a few minutes. There are no fuel or heating costs since the reaction takes place at ordinary temperatures and its rapidity reduces overhead by speeding up production. No new equipment is required to install the process and the reagent cost is lower.

The process is already established as standard practice in several Pacific Coast and Canadian mills. U. S. Patent No. 1,873,924 and Canadian Patent No. 307,440 have been granted to Great Western Electro Chemical Co., discoverer of the hydrosulphite process.

For newsprint, book papers, fruit wrap and kraft the hydrosulphite process is producing a whiter sheet even from western hemlock or dark and discolored woods than has heretofore been possible with any other bleaching agent.

#### SOCIETY OF AMERICAN FORESTERS

—will meet in California this year for their 32nd annual conference, which will be held in San Francisco, December 12-16, followed by field trips from Los Angeles into the mountains of southern California on December 17-18, according to announcement by Dr. E. P. Meinecke, chairman of the committee on arrangements.

The Society of American Foresters, which was organized in 1900, is composed of more than 1,600 technically trained foresters and scientists of the United States and Canada in the employ of Federal and State forestry departments, private organizations and companies and forest schools and associations. The last time the annual meeting was held in the West was in California in 1927.

The first two days of the conference, on which the council meets, offer an opportunity for trips of great scenic and professional interest into the redwood and Sierra Nevada regions. The program for the general meetings on December 14-15, will bring together nationally known leaders for a frank discussion from all angles of the present status of the idea of conservation in forestry and of the outlook for the future. December 16 will be devoted to a discussion of society affairs. The annual banquet will be held in San Francisco.

Field trips in southern California will take the delegates into the timbered and chaparral regions of the Angeles and San Bernardino National Forests, where they will obtain first-hand information on the pressing water conservation and fire problems of the southland.

Many leading foresters from all parts of the United States have signified their intention to come to California for the annual conference.

#### G. D. JENSSEN COMPANY

—is now conducting its Pacific Coast affairs from new headquarters at 3311 First Avenue South, Seattle, having moved to the new location from 1017 White Building, effective September 1st. The new telephone number is Seneca 1034. A. H. Lundberg is manager of the Pacific Coast office.

#### FOR FOREST RESEARCH

—and demonstration purposes a 10,000-acre tract of typical Douglas fir timber within the Columbia national forest has been set aside under a recent order of Chief Forester R. Y. Stuart, of the U. S. Forest Service. The area lies near the geographic center of a broad belt of Douglas fir land that extends north into Canada and south into California on the west slope of the Cascade range. It will be known as the Wind River experimental forest and will serve as a field laboratory and proving ground for the Pacific Northwest forest experiment station, according to Thornton T. Munger, director.

The area, which is located in the Wind River watershed 10 miles north of Carson, Washington, includes 4,500 acres of typical old-growth, virgin timber, 3,500 acres of young growth now 90 years old, and 2,000 acres of old burn in varying degrees of fire kill and restocking, part of which has been reforested by planting. Of the old growth area 1,200 acres will be set aside as a natural area to be kept in its virgin state for educational and scientific purposes. Studies, many of which are already under way, will cover economic selective logging and other methods of lumbering, slash disposal, fire prevention and control technic, natural and artificial reforestation, growth and yield studies, thinnings, the control of insects and disease, and the interrelation of plant and animal life in the forest, according to the announcement.

The setting aside of this area does not mean that less work will be done in other parts of the region, but that such research and demonstration work as can best be conducted from a single center will be concentrated there, it is said.

#### **ALTHOUGH 95%**

—of the shares of 10% preferred of Multnomah Lumber & Box Company have been turned in for exchange for the 6% non-cumulative preferred of International Pacific Pulp & Paper Company, no effort has been made to transfer the properties of the former company to the latter as was originally planned.

President Fred A. Douty explains that there is now no present prospect or intention of branching into pulp-paper manufacture, as was intended originally with the idea of regaining some of the wooden box business lost to the pulp board and paper box industry.

Last year Multnomah Lumber & Box Company showed a nominal profit of \$7000 before charging off depreciation. After allowing for depreciation there was a small deficit. For the present Multnomah Lumber & Box Company will continue, International in effect acting as a holding company.

### ROTARY KILN WANTED

Good Used Rotary Kiln approximately 80 feet by 5 feet. Give full description, where located and price.

GLADDING McBEAN CO., 1500 First Ave. South, Seattle, Wash.

#### MILL MEN GO IN FOR MOUNTAINEERING

—down at Camas, Washington, where the affairs of the community revolve about the twelve-machine paper mill of the Crown Willamette Paper Company. Quite a few of the mill men have gone in for the gentle week end sport of mountain climbing. Staring them in the face every bright day across the broad Columbia River in Oregon is magnificent Mount Hood, rearing its perpetual snow cap 11,253 feet into the skies.

All this has been too tempting and too challenging to a lot of the Camas folk and a number of parties have been organized to make the arduous climb. For instance, here are the people who made the climb on Sunday, August 7. You'll recognize a lot of paper

mill folks among them.

C. Anderson, Maurice Phelps and Ole Lien guided the party. Others making the ascent were: S. A. Salmonson and Elna, Walter and Raymond Salmonson, John Ziegler and John Ziegler, Jr., Harry Jones, Elton Jones, Eva, Elsie and Bill Scott, Mike Drake, A. G. Natwick and Grace, Phyllis and Ben Natwick, all of Camas; Farnum White, H. Berger, W. Halzer, John Littlehales, B. Tator and Christian and Herbert Freer of Portland, and Helen and Elizabeth Willson of Seattle.

It is said that there was some scouting for higher paper prices, or something to hang such prices on, up there on the mountain's slopes.

du

255

of

Can U. Gt. Ger Ner Swe Jap Fra Fin Nor Rus Spa Swi Bel Cze Pol Est Me De Lat

ar T

du

ge 50

re

th

pi 22

30

fo 1, 2,

#### CHARLES ABBOT NEWHALL

—is offering a "new deal with Newhall" to all who will vote for him on the Democratic ticket to represent the 46th senatorial district in Washington as state senator.

Mr. Newhall is a consulting chemical engineer, with offices in the Smith Tower, Seattle. He has been identified for many years with the growing pulp and paper industry of the Pacific Coast, and with other industries in which chemical engineering plays a part.

The announcement of Mr. Newhall's candidacy comes printed on "paper made in Washington, from Washington pulp and Washington wood, made with Washington chemists, engineers, and workmen."

### IMPORTS OF PULP WOOD AND WOOD PULP INTO THE UNITED STATES BY COUNTRIES AND CUSTOMS DISTRICTS

JULY, 1932

Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Figures Subject to Revision.)

|                                   |           |  |                        |          |                      | PU  |   |  | _                                       |            |                                       |                         |                       |         |   |
|-----------------------------------|-----------|--|------------------------|----------|----------------------|---|---|--|---|------------|---------------------------------------|-------------------------|-----------------------|---------|---|
| Cord                              | Spruce    |  | Other<br>Cords Dollars |          | Spruce Cords Dollars |   | Other<br>Cords Dolla                    |  | Pollars                                 | lars Cords |                                       | Rossed -                | Other<br>Cords Dollar |         |   |
| Countries—                        |           |  |                        |          |                      |   |   |  |   |            |                                       |                         |                       |         |   |
| Sov. Rus. in Eur.<br>Canada 10,69 | 9 92,     | 181  |                        |          |                      | 3,842<br>46,466                           | 37,434<br>473,379                       |  | ,274                                    | 24,965     | 120                                   | 93                      | 2                     |         | ********                                |
| Total 10,69                       | 19 92     | 181  |                        | -        |                      | 49,948                                    | 510,813                                 |  | ,274                                    | 24,965     | 120                                   | 93                      |                       | _       |   |
| Total Imports of                  |           |  | , 1932–                | -66,04   | 1 cords;             |   | ,                                       |  | 107.4                                   | 24,505     | 120                                   | 33.                     | 2                     |         |   |
|                                   |           |  |                        |          |                      | wo  | OD PULP                                 |  |   |            |                                       |                         |                       |         |   |
|                                   |           | Mechanically<br>Unbleached<br>Tons Dollars |                        | Bleached |                      | Chemical Unbleached Sulphite Tons Dollars |   | Chemical<br>Bleached<br>Sulphite<br>Tons Dollars |   | Unb        | emical<br>leached<br>phate<br>Dollars | ed Bleacher<br>Sulphate |                       | ed Unbl |   |
| COUNTRIES—                        |           |  |                        |          |                      |   |   |  |   |            |                                       |                         |                       |         |   |
| Austria                           |           |  |                        |          |                      |   |   | 75   | 2,727                                   |            |                                       |                         |                       |         |   |
| Czech.                            |           |  | *********              | *****    | *********            | 378                                       | 9,178                                   | 1,052  | 36,554                                  | ******     | **                                    |                         | *********             |         | -                                       |
| Estonia                           |           |  | ***********            | *****    | ********             | 1,516                                     | 39,192                                  | 1,072  | 30,774                                  | *******    | ******                                | -                       | ***********           | ****    | *************************************** |
| Finland                           |           | 162  | 25,890                 | 281      | 4,810                | 5,283                                     | 187,636                                 | 623  | 26,352                                  | 5,140      | 152,395                               | 11                      | 568                   | ****    | ********                                |
| Germany                           |           |  |                        |          | .,,,,,,,,,,,         | 4,207                                     | 141,419                                 | 2,335  | 105,773                                 | 212.40     |                                       | ********                | 700                   |         |   |
| Lithuania                         |           |  |                        | *****    |                      | 140                                       | 3,518                                   |  |   |            |                                       |                         |                       |         | *********                               |
| Norway                            |           | 25   | 1,602                  | 275      | 4,378                | 1,785                                     | 51,820                                  | 3,707  | 153,850                                 | 162        | 4,408                                 |                         | ************          | ****    |   |
| Sweden                            |           | 262  | 3,298                  | 503      | 10,055               | 5,036                                     | 158,371                                 | 2,185  | 79,797                                  | 5,732      | 152,771                               |                         | ***********           |         | -                                       |
| Canada                            | 7,0       | 72   | 137,447                |          |                      | 3,338                                     | 104,154                                 | 8,636  | 431,474                                 | 1,652      | 92,403                                | 1,559                   | 140,092               | 26      | 972                                     |
| Total                             | 9,        | 321  | 168,237                | 1,059    | 19,243               | 21,683                                    | 695,288                                 | 18,613   | 836,527                                 | 12,686     | 401,977                               | 1,570                   | 140,660               | 26      | 972                                     |
| CUSTOMS DISTRI                    |           |  |                        |          |                      |   |   |  |   |            |                                       |                         |                       |         |   |
|                                   | T         | ons  | Dollars                | Tons     | Dollars              | Tons                                      | Dollars                                 | Tons   | Dollars                                 | Tons       | Dollars                               | Tons                    | Dollars               | Tons    | Dollar                                  |
| Maine and New Hamp                | shire. 1, | 126  | 28,107                 |          | ********             | 1,267                                     | 42,757                                  | 3,485  | 159,277                                 | 2,307      | 46,936                                |                         |                       |         | -                                       |
| Vermont                           |           | 301  | 14,745                 | *****    |                      | 270                                       | 6,892                                   | 425  | 21,108                                  | 1,001      | 66,958                                | 1,093                   | 100,670               | 26      | 972                                     |
| Massachusetts                     |           | 75   | 943                    | *****    |                      | 1,949                                     | 58,904                                  | 2,972  | 124,296                                 | 2,485      | 75,930                                | *****                   |                       |         | -                                       |
| Connecticut                       |           |  |                        |          |                      | 493                                       | 16,554                                  | ********   | ********                                |            |                                       |                         |                       | ****    | -                                       |
| St. Lawrence                      |           | 164  | 8,524                  | ****     | *******              | 112                                       | 3,061                                   | 1,964  | 99,114                                  | 430        | 15,166                                | ******                  | **********            |         | -                                       |
| Rochester                         |           | 134  | 3,130                  | *****    |                      | 1 047                                     | 36 631                                  | 32   | 1,373                                   | ******     |                                       | 1.40                    | 12 454                | -       | -                                       |
| Buffalo<br>New York               |           | 343  | 6,138                  | 126      | 2 127                | 1,047                                     | 36,631                                  | 1,578  | 74,685                                  | 626        | 10 700                                | 149                     | 13,454                |         |   |
| Philadelphia                      | I .       | 431  | 6,442                  | 126      | 2,137                | 4,950                                     | 164,239<br>83,196                       | 2,762<br>953                                     | 122,761                                 | 2,422      | 19,798                                |                         | ************          |         | *************************************** |
| Maryland                          | *******   | 800  | 14,676                 | 200      | 3,362                | 2,361                                     | 87,260                                  | 1,475  | 52,447                                  | 868        | 23,755                                | 11                      | 568                   |         | *******                                 |
| Virginia                          | ********  | 230  | 5,279                  | 200      | 3,302                | 550                                       | 21,346                                  | 154  | 5,414                                   |            |                                       |                         |                       |         |   |
| New Orleans                       |           |  | ,,=//                  | 230      | 3,689                | 109                                       | 4,165                                   | 200  | 7.851                                   |            | *******                               | ********                |                       |         | -                                       |
| Los Angeles                       |           |  | *************          | 503      | 10,055               | 192                                       | 4,998                                   | 200  | 7,071                                   | ********   | *******                               | *******                 |                       |         | -                                       |
| San Francisco                     |           |  | **********             |          | 10,077               | 499                                       | 11,677                                  | *******  |   |            | *****                                 | ******                  |                       |         | *******                                 |
| Washington                        |           |  | *********              |          |                      | 95  | 3,683                                   | *******  | *************************************** | *******    | *******                               | ********                | ***********           |         |   |
| Dakota                            |           |  |                        |          | *********            |   | *************************************** | *********  |   |            | 4,598                                 |                         |                       |         |   |
| Duluth and Superior               | 1,        | 789  | 35,653                 | ******   | ********             | 300                                       | 7,356                                   | *******  | **********                              | *******    | ******                                |                         |                       |         | -                                       |
| Wisconsin                         |           | 447  | 15,015                 | ******   | ********             | 2,379                                     | 75,244                                  | 400  | 17,103                                  |            | 62,252                                | ******                  |                       |         |   |
| Michigan                          |           | 321  | 6,586                  | ******   | *******              | 2,517                                     | 67,325                                  | 2,213  | 111,827                                 |            | 5,681                                 | 217                     | 25,968                |         |   |
| Ohio                              |           | *****                                      | *********              | ******   | *******              | *********                                 |   | *******  | ********                                | 500        | 17,360                                | *******                 | *******               | -       |   |
| Total                             | 9,        | 321  | 168,237                | 1,059    | 19,243               | 21,683                                    | 695,288                                 | 18,613   | 836,527                                 | 12,686     | 401,977                               | 1,570                   | 140,660               |         | 97                                      |

Total Imports, All Grades of Wood Pulp, July, 1932-64,958 tons; \$2,262,904.

#### World Production of News Print Paper, 1927-1931

The table below brings together the best reports we have been able to collect upon world news print production during the past five years. Especial thanks for assistance in the compilation are due the Department of Commerce in Washington.

News Print Production, 1927-1931 (2,000-lb. Tons)

|             |         | (-,-      |         | ,       |           | e 35    |
|-------------|---------|-----------|---------|---------|-----------|---------|
|             | 1927    | 1928      | 1929    | 1930    | 1931      | 5-Year  |
|             |         |           |         |         |           | Average |
|             |         | 2,381,000 |         |         |           |         |
| U. S1       |         |           |         |         | 1,157,000 |         |
| Gt. Britain | 615,000 | 646,000   |         |         | 719,000   |         |
| Germany     | 565,000 | 600,000   | 623,000 | 590,000 | 540,000   | 584,000 |
| New-        |         |           |         |         |           |         |
| foundland   | 203,000 | 231,000   | 256,000 | 287,000 | 295,000   | 254,000 |
| Sweden      | 239,000 | 234,000   | 275,000 | 240,000 | 265,000   | 251,000 |
| Japan       | 146,000 | 267,000   | 286,000 | 285,000 | 258,000   | 268,000 |
| France      | 121,000 | 136,000   | 210,000 | 240,000 | 243,000   | 190,000 |
| Finland     | 200,000 | 214,000   | 217,000 | 223,000 | 241,000   | 219,000 |
| Norway      | 192,000 | 198,000   | 189,000 | 202,000 |           |         |
| Russia*     | 10,000  | 7,000     | 48,000  | 90,000  | 100,000   | 51,000  |
| Netherlands | 77,000  | 76,000    | 77,000  | 84,000  | 79,000    | 79,000  |
| Italy       | 42,000  | 45,000    | 52,000  |         |           | 55,000  |
| Austria     | 50,000  | 57,000    | 62,000  | 64,000  | 62,000    | 59,000  |
| Spain       | 25,000  | 26,000    | 30,000  | 32,000  | 62,000    | 35,000  |
| Switzerland | 40,000  | 40,000    | 48,000  | 47,000  | 49,000    | 45,000  |
| Belgium     | 50,000  | 50,000    | 57,000  | 50,000  | 44,000    | 50,000  |
| Czecho.     | 45,000  |           |         |         |           |         |
| Poland      | 17,000  |           |         |         |           |         |
| Estonia     | 21,000  |           |         |         |           |         |
| Mexico      | 14,000  |           |         |         |           |         |
| Denmark     | 16,000  |           |         |         |           |         |
| Latvia      | 3,000   |           |         |         |           |         |
|             | - 1     | 2,000     | 1,000   | 1,000   | 2,000     | 31000   |

1

3

1-

972 972

llars

Total .....6,364,000 6,744,000 7,319,000 7,025,000 6,622,000 6,812,000

It will be noted that the countries showing substantial increases in news print production during this period are Canada, Great Britain, Newfoundland and Finland. There has, of course, been an increase in Russian production but there seems to be no present possibility of getting accurate figures from that country. The nearly 50 per cent decrease in Norwegian production in 1931 was due to the prolonged strike in that year. The only country to show a marked decrease in news print output during the period covered is the United States.

The 5-year average figures may perhaps be taken to represent something like normal production of the countries concerned.

Source—The News Print Service Bureau.
\*All figures for Russia are estimates.
†Estimated.

News Print Production-July, 1932

Production in Canada during July, 1932, amounted to 142,491 tons and shipments to 145,431 tons, reports the News Print Service Bureau. Production in the United States was 74,502 tons and shipments 76,857 tons, making a total United States and Canadian news print production of 216,993 tons and shipments of 222,288 tons. During July, 24,528 tons of news print were made in Newfoundland and 1,082 tons in Mexico, so that the total North American production for the month amounted to 242,603 tons.

The Canadian mills produced 192,936 tons less in the first seven months of 1932 than in the first seven months of 1931, which was a decrease of 14 per cent. The output in the United States was 71,923 tons or 10 per cent less than for the first seven months of 1931, in Newfoundland 7,346 tons or 4 per cent less, and in Mexico 1,768 tons less, making a North American decrease of 273,973 tons or 12 per cent.

Stocks of news print paper at Canadian mills totalled 47,017 tons at the end of July and at United States mills 33,369 tons, giving a combined total of 80,386 tons compared with 85,681 tons on June 30.

| North American Production | New | States | New | New

#### THE BETTER FEELING

—about which so much is being heard these days is being backed up with actual, tangible orders in the East, says Max Oberdorfer, president of St. Helens Pulp & Paper Company, who has just returned from a two weeks' visit to New York and way points. There are more inquiries, too. But, says Mr. Oberdorfer, the terrible aspect of the situation is that in the face of this evident upturn prices are still falling, although they are already below production cost.

However, he takes cheer from the fact that in his experience the end of a depression has always been marked in the paper industry with prices going all to pieces, so he feels that the very slump itself is a good sign.

Not only in New York but in Chicago, St. Louis and other cities he found decided optimism about business. Another business man on a visit of several weeks into California, arrived in San Francisco the latter part of July and found everybody morose over business prospects. Continuing on to Los Angeles, he came back in a couple of weeks and found both the big and little businessmen buoyant, hopeful and happy.

#### THE IMPORT COMMITTEE

—of the American Paper Industry has started formal action involving foreign M. G. Sulphite wrapping paper by filing complaint of suspected dumping. Similar action is to be taken on forein kraft wrapping, and is under consideration as to German vegetable parchment.

The United States Customs Court has rendered a decision whereby fourteen importations of embossed or coated boards of the general trunk board type are held dutiable at 30% instead of 10% as claimed by the importers.

Customs officials have held sunburst and embossed cover papers dutiable as decorated papers at higher rates than the 30% provided for plain cover paper. An importation of M. G. Sulphite at Houston has been held by customs officials to have been undervalued.

Cases involving paper estimated by Warren B. Bullock, manager of the import committee, to be worth about \$40,000 have been abandoned in the customs courts by the importers after protest had been carried to the court from the action of customs officials. Among the cases were fifteen of writing paper and envelopes, seventeen of fancy box cover paper, and four on Canadian paper claimed to be standard newsprint but held to be dutiable as novel or tablet news.

#### **CREDITORS**

—of the Spaulding Pulp & Paper Company, Newberg, Oregon, made three requirements to prevent the firm from being forced into bankruptcy. These agree (1) to accept bond for the amount of their claims; (2) 51% of the stock must be put into the hands of the recently appointed trustees for voting; (3) \$50,000 of new money must be raised.

Requirements One and Three had been met when a meeting was held September 1, but there is some balking on requirement Two. Only about 20% of the stock has been assigned. The creditors tentatively agreed to an extension of 30 days to try to raise the additional 31%.

#### L. C. PEPPELL

—has won a commission as lieutenant, junior grade, in the U. S. Naval Reserve Force. He is treasurer of the Puget Sound Pulp & Timber Company.

#### F. C. TAYLOR

—who represents the Rainier Pulp and Paper Company in the Orient, sailed from San Francisco, August 26, for his Kobe, Japan, headquarters, after an extensive trip throughout the United States. Mr. Taylor reported that business in Japan was but "fair to middling" but that the demand for rayon pulp was holding up. Japan is the fifth on the list of rayon producing countries of the globe. Mr. Taylor has been with the Rainier company 12 years and has been out in the Orient two years.

#### STANDARDIZED APPLE WRAP

—recommendations have been sent out by the Bureau of Standards, Department of Commerce, to producers, distributors and users of the item with an invitation to endorse.

Pursuant to a request of the principal users of apple wraps a conference of manufacturers and users was held in Seattle on May 19th last to consider the development of a quality standard. The specifications on which endorsement is now requested is the result of this joint enterprise. General adoption will provide a medium by which manufacturers can guarantee the quality of their product and on which the apple packer may depend without resort to expensive laboratory tests.

Those of the paper fraternity who participated in the May meeting and the development of the standards included: William R. Barber, research chemist; R. L. Brackett, sales manager, Northwest Division; R. D. Dickey, district manager, and M. W. Phelps, chief chemist, all of the Crown Willamette Paper Company. The Hawley Pulp & Paper Company was represented by Ray J. Schadt, chief chemist; Fred G. Statham, district manager, and W. E. Graves. The Columbia River Paper Mills was represented by Nils G. Teren, manager, and A. B. Galloway, general sales manager. Ralph Reid, chemist, represented the St. Helens Pulp & Paper Co.

MA

Yo

I

sma

ed

pro

sep

lot

kee

ani

cru

the

sha

for

the

all

do

ch

co

las

pla

CI

st be fo

m

A representative standing committee of the industry, which was appointed to receive comments and make recommendations for revision of standards included of the above named: Messrs. Schadt, Phelps, Barber, Reid, Teren, and in addition Erik Fernstrom, California Fruit Wrapping Mills, Pomona, Calif.

#### JAPAN'S IMPORTS OF CHEMICAL PULP

—in June, 1932, were as follows: Canada, 6,536,800 lbs.; U. S. A., 4,088,133 lbs.; Norway, 5,963,200 lbs.; Sweden, 1,264,400 lbs.; Europe, 1,584,800 lbs.; total, 10,437,333 lbs.

#### IMPORTS OF PULP WOOD AND WOOD PULP INTO THE UNITED STATES BY COUNTRIES AND CUSTOMS DISTRICTS

June, 1932

Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Figures Subject to Revision)

|                                    |              |  |                 |   |                   |                                    | LP WOODS         |                                  |                  |                                    |                  |                                  |   |  |                     |
|------------------------------------|--------------|--|-----------------|---|-------------------|------------------------------------|------------------|----------------------------------|------------------|------------------------------------|------------------|----------------------------------|---|--|---------------------|
|                                    | Spruce Other |  |                 |   |                   | Spruce Peeled Other                |                  |                                  |                  | Spruce Rossed Ott                  |                  |                                  |   |  |                     |
|                                    | Cords        | Dollars                                    |                 |   | llars             | Cords                              | Dollars          | Cor                              |                  | ollars                             | Cords            | Dolla                            | гв Со                                   |  | Dollar              |
| Countries—                         |              |  |                 |   |                   |                                    |                  |                                  |                  |                                    |                  |                                  |   |  |                     |
| Sov. Rus. in Eur.<br>Canada        | 11,266       | 94,464                                     | -               |   |                   | 6,513<br>90,523                    |                  |                                  | ,277             | 57,241                             | 51               | 612                              |   |  | *****               |
| Total 11,266 Total Imports of Pulp |              |  |                 | —117,630 cords;                         |                   | 97,036<br>\$931,676                |                  | 9,277                            |                  | 57,241                             | 51               | 612                              |   |  |                     |
|                                    |              |  |                 |   |                   | W//                                | OOD PULE         |                                  |                  |                                    |                  |                                  |   |  |                     |
|                                    |              | Mechanically Ground<br>Unbleached Bleached |                 |   |                   | Chemical<br>Unbleached<br>Sulphite |                  | Chemical<br>Bleached<br>Sulphite |                  | Chemical<br>Unbleached<br>Sulphate |                  | Chemical<br>Bleached<br>Sulphate |   | Soda Pulp,<br>Unbleached<br>and Bleached |                     |
| 19                                 |              | Tons                                       | Dollars         | Tons                                    | Dollars           | Tons                               | Dollars          | Tons                             | Dollars          | Tons                               | Dollars          | Tons                             | Dollars                                 | Tons                                     | Dollar              |
| COUNTRIES-                         | -            |  |                 |   |                   |                                    |                  |                                  |                  |                                    |                  |                                  |   |  |                     |
| Czech.                             |              |  |                 |   |                   | 561                                | 16,160           | 684                              | 24,714           | **********                         |                  |                                  |   |  |                     |
| Estonia                            |              |  | -               |   |                   | 1,433                              | 39,949           | **********                       |                  |                                    |                  |                                  |   | ********                                 |                     |
| Finland                            |              | 1,136                                      | 18,682          | 25                                      | 618               | 6,942                              | 253,314          | 1.113                            | 50,885           | 5,760                              | 182,200          | 180                              | 7,934                                   |  | **************      |
| Garmany                            |              |  |                 |   | ******            | 3,812                              | 122,422          | 4,535                            | 204,712          | ***********                        |                  |                                  | .,                                      | ********                                 |                     |
| Norway                             |              | 250  | 3,010           | 135                                     | 2,185             | 2,765                              | 79,758           | 1,992                            | 75,664           | 729                                | 21,872           | *******                          |   | ********                                 |                     |
|                                    |              |  | 24,957          | 1,016                                   | 20,432            | 6,810                              | 213,884          | 1,279                            | 49,354           | 8,873                              | 247,146          | *******                          | -                                       |  |                     |
| Canada                             |              | 9,340                                      | 215,485         | ****                                    | ****              | 4,833                              | 160,131          | 8,704                            | 461,581          | 1,137                              | 58,640           | 1,760                            | 158,039                                 | 109                                      | 4,67                |
| Total                              |              | 11,475                                     | 262,134         | 1,176                                   | 23,235            | 27,156                             | 885,618          | 18,307                           | 866,910          | 16,499                             | 509,858          | 1,940                            | 165,973                                 | 109                                      | 4,67                |
| CUSTOMS DI                         |              |  |                 |   |                   |                                    |                  |                                  |                  |                                    |                  |                                  |   |  |                     |
| Maine and N. H                     | ampshire.    | 2,257                                      | 60,864          | Correspond                              |                   | 6,627                              | 226,301          | 4,342                            | 211,770          | 6,218                              | 172,895          | 153                              | 6,946                                   |  | ********            |
| Vermont                            |              |  | 15,343          | -                                       | ***********       | 247                                | 6,853            | 479                              | 23,910           | 584                                | 37,347           | 1.259                            |   |  | 4,67                |
| Massachusetts                      |              |  | 512             | *******                                 |                   | 2,826                              | 92,154           | 1,964                            | 88,800           | 397                                | 11,804           | ******                           |   |  | *******             |
| Rochester                          |              | 750  | 14 070          | *************************************** |                   | 111                                | 4.000            | 31                               | 1,343            |                                    |                  |                                  |   | -3.000000                                |                     |
| St. Lawrence<br>Buffalo            |              |  | 14,878          | ******                                  | *********         | 166                                | 4,202            | 1,076                            | 58,013           | 196                                | 5,953            | 10                               | 993                                     |  | -                   |
|                                    |              |  | 8,362<br>34,951 | 60                                      | 1.122             | 1,865                              | 64,207           | 1,061                            | 65,635           | 1 77 5                             | 55 115           | ******                           |   |  |                     |
| Philadelphia                       |              |  | 60,607          | 60                                      | 1,122             | 2,344                              | 97,648<br>93,704 | 1,079<br>3,279                   | 43,279           | 1,715                              | 55,117           |                                  | *****                                   | *****                                    |                     |
| Maryland                           |              |  | 13,423          | 100                                     | 1,681             | 4,575                              |                  | 1.616                            | 138,358          | 404                                | 13,264           | *****                            |   | ******                                   |                     |
| Virginia                           |              |  | 13,723          | 100                                     | 1,001             | 92                                 | 3,799            | 384                              | 62,744<br>18,052 | 1,912                              | 56,298<br>31,994 | 27                               | 988                                     | *****                                    |                     |
| New Orleans                        |              |  | 704             | **********                              |                   | 283                                | 10,261           | 225                              | 8,289            | 400                                | 12,798           |                                  | 700                                     | ****                                     |                     |
| Los Angeles                        |              |  | ,04             | 1.016                                   | 20.432            | 318                                | 7,999            | 243                              | 0,207            | 506                                | 13,484           | ******                           |   | ******                                   |                     |
| San Francisco                      |              |  |                 | 2,010                                   | 20,736            | 571                                | 11,029           |                                  | ***********      | 200                                | 13,704           | Anceston                         | *************************************** | *******                                  | ***********         |
| Washington                         |              |  |                 |   | deducation to the | 7/1                                | 22,027           | 403                              | 15,703           |                                    | -                | *******                          |   |  |                     |
| Dakota                             |              |  |                 | -                                       | **********        |                                    |                  |                                  | 27,707           | 77                                 | 2,265            | ******                           | ************                            | *******                                  | -                   |
| Duluth and Sup-                    |              |  | 19,904          |   |                   | 210                                | 5,770            | *********                        | ************     | *********                          | ***********      | *******                          |   |  |                     |
|                                    |              |  |                 |   | -                 |                                    |                  |                                  | **********       | 901                                | 26,591           | *****                            |   |  | A.V. A.M. STATEMENT |
| Michigan                           |              |  | 32,586          | *******                                 |                   | 3,943                              | 117,523          | 2,368                            | 131,014          |                                    | 13,075           | 491                              | 41,184                                  | *****                                    |                     |
| Chicago                            | *******      |  | ************    | *********                               |                   |                                    |                  |                                  |                  | 1,919                              | 56,973           | *******                          | ********                                |  | ********            |
| Total                              |              | 11,475                                     | 262,134         | 1.176                                   | 23,235            | 27,156                             | 885,618          | 18.307                           | 866,910          | 16,499                             | 509,858          | 1.940                            | 165,973                                 | 109                                      | 4,67                |

#### MANAGEMENT OF WOODLOTS

t; R. ef y. d n, ia n,

lp

d,

iit

al.

,673

,673

,673

—and private estate forests on a cooperative basis as an economic measure is growing in various parts of the country, according to a statement issued by the New York State College of Forestry, Syracuse, N. Y.

Practically all estates and nearly every farm have small areas of forests. The forests are usually neglected and allowed to deteriorate because it would not be profitable to engage the services of a forester for each separate area, yet a great deal of time and money is spent on the development of other features of such farms and estates. By cooperating, a number of woodlot owners can combine and hire a forester who will keep the timber crops in a healthy growing condition at small cost to each owner. The improvement in the annual increase of tree growth together with other accruing benefits on areas thus managed will largely offset the amount of money any one owner may pay as his share of the forester's salary.

Several counties in New York state have engaged foresters in order to bring the scattered woodlots of the county under scientific management. Practically all of the large woodland owners employ foresters as does the state which now has ten district foresters in charge of its forests outside of the state parks. There is no reason why small woodlot owners should not do likewise.

A supervising forester should be able to take care of a large aggregate area of forest land. He could be consulted at any time. He could handle the timberlands or plantations of the owners on a unit basis, plan for protection against fire, insects and disease, develop the most valuable species, and market the crop at best prices.

#### CROWN ZELLERBACH CORPORATION

-has started its new fiscal year off with a loss, it was revealed following the annual meeting of stockholders.

For the first three months of the new fiscal year ended July 31, 1932, the company reported a deficit of \$5,406 after deducting interests of minority stockholders but exclusive of profits in the company's own bonds bought for redemption. This compares with a profit for the first quarter of last year of \$757,213.

The annual meeting was routine. All officers and directors were re-elected, including Louis Bloch, chairman of the board; I. Zellerbach, president; M. R. Higgins, chairman of the executive committee; A. B. Martin, E. M. Mills and J. D. Zellerbach, executive vice presidents; Thomas McLaren, vice president and treasurer; H. L. Zellerbach, R. A. McDonald and J. Y. Baruh, vice presidents, and D. J. Goldsmith, secretary.

#### HOTEL CONGRESS



Sixth at Main Street Portland, Ore.

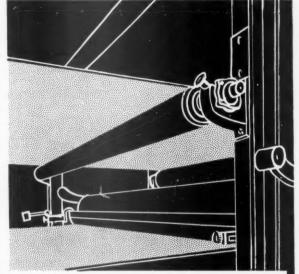
AN INVITATION

TO PULP and PAPER MEN who appreciate a hotel favorably located within the business area.

200 rooms, all with baths. Splendid garage facilities.

Moderate rates.

Marshall B. Grenfell Resident Manager



# Not too tight but just right!

Your stretch roll can make or break your felt.

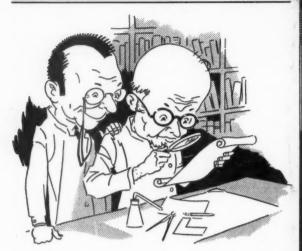
Coach your machine tenders on the proper way to put on a felt . . . on the proper way to adjust it. Bear in mind that excessive stretching is likely to rupture it or close the pores . . . narrow the trim . . . reduce general effectiveness. If you would obtain maximum water extracting service and long life, run your felts at the proper tension.

Above all use ORR FELTS. We make them for all branches of the industry and for all paper machine requirements. The felt best suited to your particular need is available in the ORR LINE.

The Orr Felt & Blanket Co.

Piqua, Ohio

ORR FELTS



#### Recently discovered manuscript proves to be first edition of Homer's Iliad

Microscopic examination of paper on which it is printed shows that the paper was made with a Hamilton Felt — an extraordinary paper of unusual feel and wearing quality.

Way back in the dim and distant past, long before the discovery of printing from movable type, Hamilton Felts were helping to make good paper as they are still helping today.

Why, the first Hamilton Felt was made as far back as 1858, almost 75 years before the dark age of the depression of 1929.

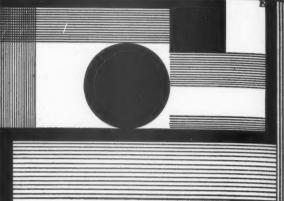
Because of the experience accumulated in those 75 years, Shuler & Benninghofen have the knowledge that results in more than ordinarily good felts.

Try as one will, the making of a felt cannot be reduced to the exactness of a fixed formula. The choice of the wool, the twist in the yarn, the fulling, the finishing are still matters to be determined by experience.

Prove this superiority of Hamilton Felts on your own machines—and you'll never use any other make of felts.

Shuler & Benninghofen, Hamilton, Ohio
Miami Woolen Mills, Established 1858





# To the PAPER MILL SUPERINTENDENT

It is sound economy to generalize in G D C Colors.

Consult our representative — he can offer suggestions.

There is a G D C color for every specialized need.

Current colors are carried in stock at all our offices.



## GENERAL DYESTUFF CORPORATION

230 Fifth Avenue New York, N.Y. 38 Natoma Street San Francisco, Cal.